



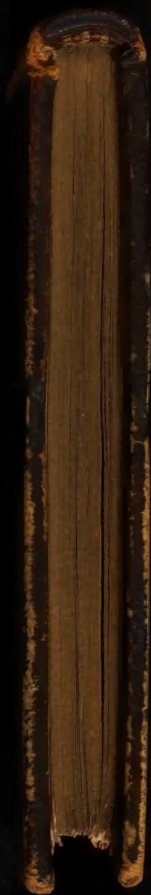


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SWIMMING

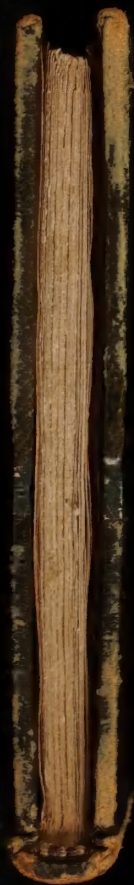






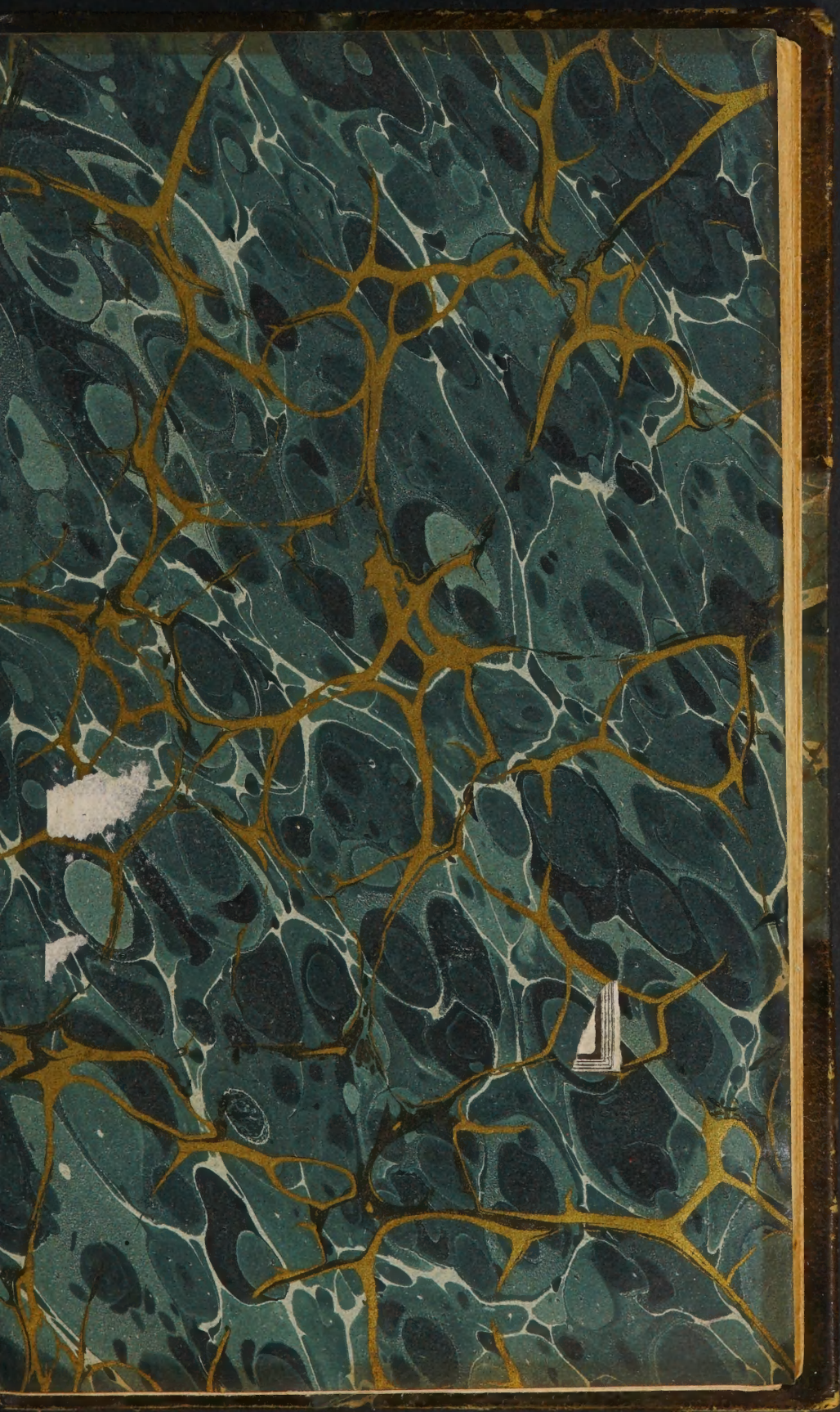














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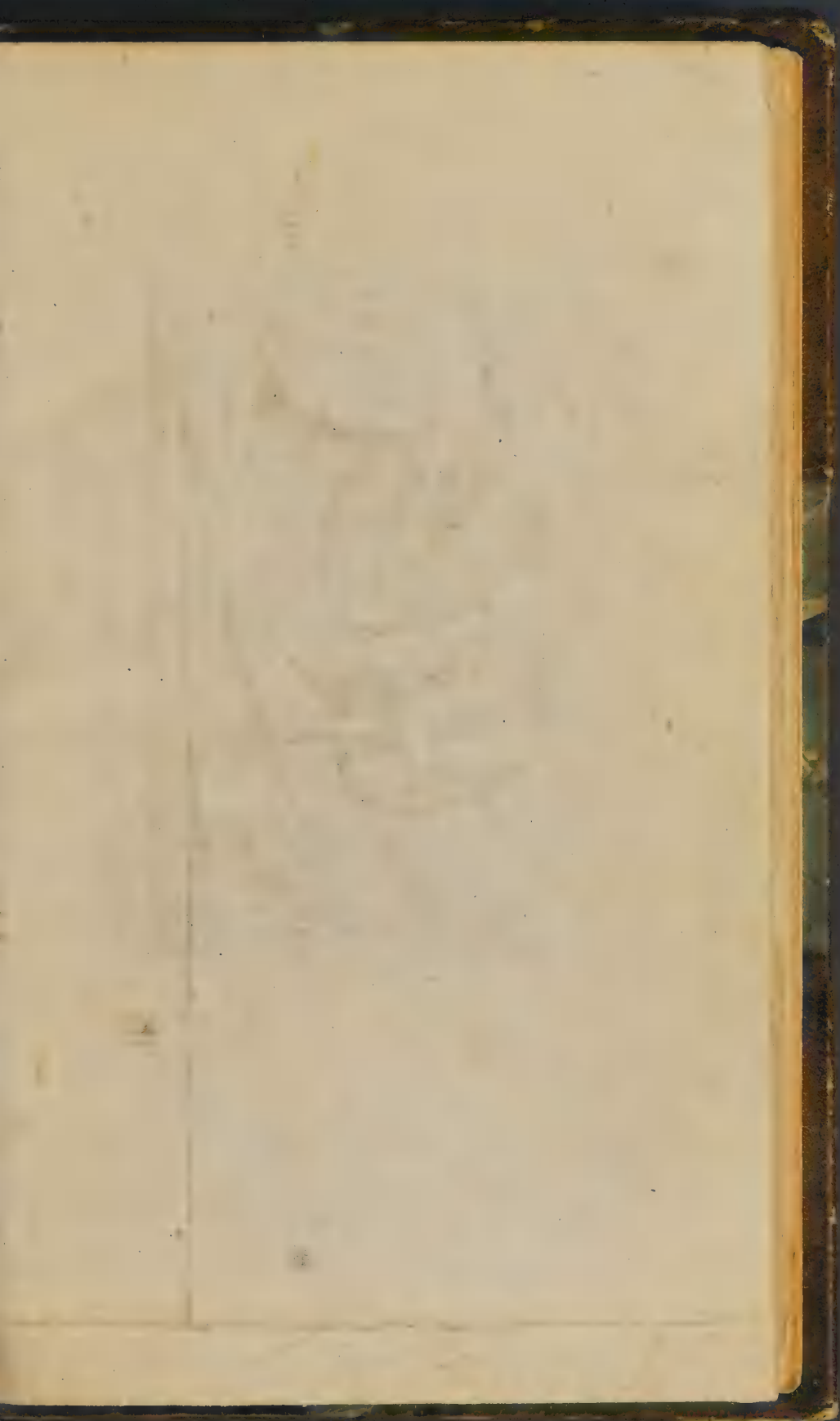
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*The Art of Swimming* Frontispiece.



Printed for M. Levey, at Little Moorfields, next London Wall.  
near Moorfields, London.

THE  
ART  
OF  
SWIMMING.

Illustrated by Forty proper  
*COPPER-PLATE CUTS,*  
Which represent the different Postures  
necessary to be used in that Art.

WITH  
Advice for BATHING.

---

By Monsieur THEVENOT. ✓

---

Done out of *French.*

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TO WHICH IS PREFIXED  
A Prefatory Discourse concerning ARTIFICIAL  
SWIMMING, or keeping one's self above  
Water by several small Portable Engines, in  
Cases of Danger.

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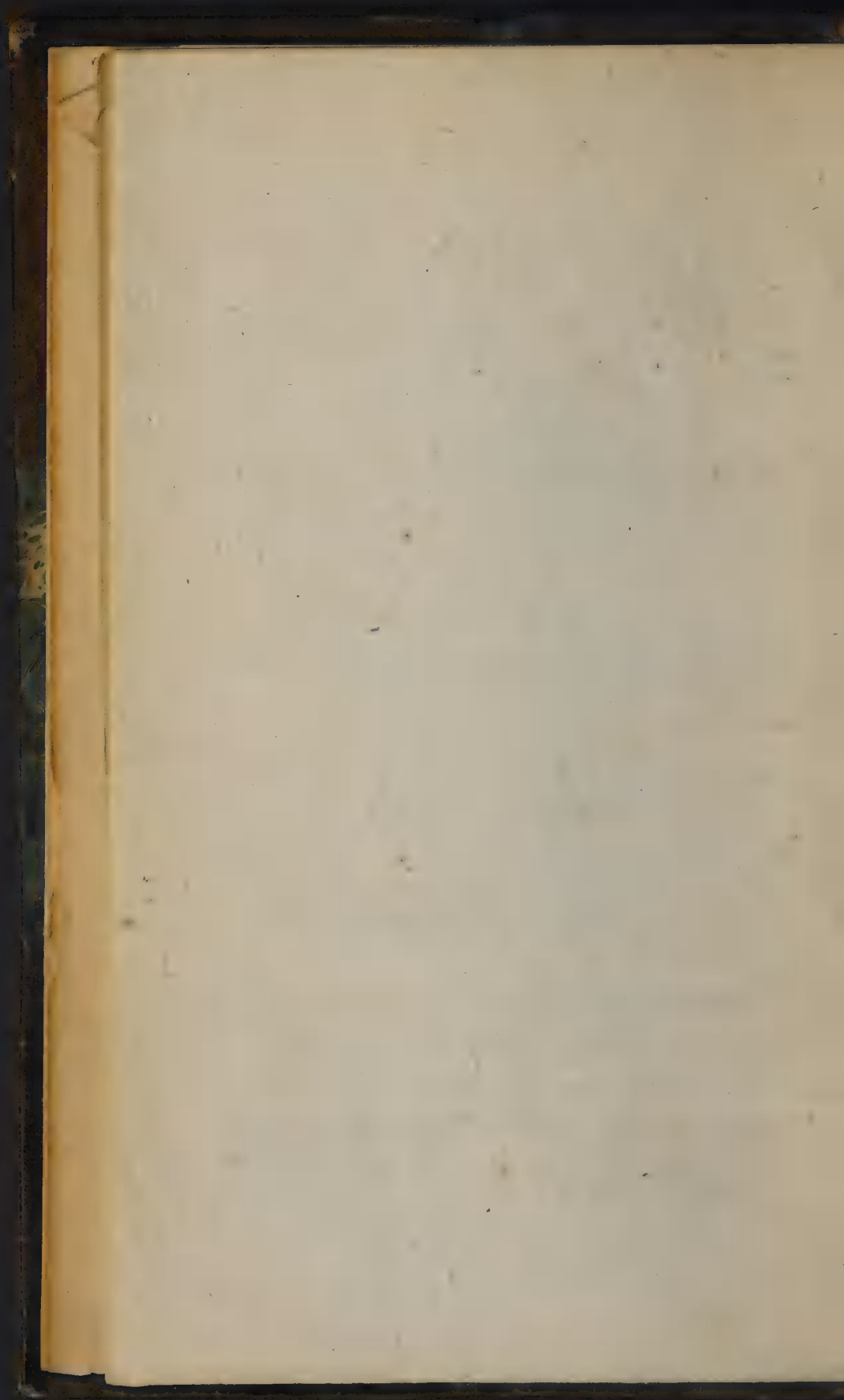
THE THIRD EDITION.

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L O N D O N :

Printed for JOHN LEVER, Bookseller, Stationer,  
and Print-Seller, at *Little Moorgate*, next to  
*London Wall*, near *Moorfields*. 1789.





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THE  
TRANSLATOR'S  
PREFACE.

OUR Author endeavours to reduce Swimming to an Art, and lays down Rules how to attain it. Without doubt had this been done long ago, and the Theory of it considered by persons capable of improving it, both Natural and Artificial Swimming might have been advanced far beyond what they are at present; by Natural Swimming I mean Swimming, without any other Instru-

### *The Translator's Preface.*

ments than what Nature has furnished us with ; and by the other I mean that with Artificial helps.

The Theory of it (as an Art) has never, that I know of, been thoroughly considered by any, although the advantages and conveniences it brings along with it, sufficiently deserve it ; and the Speculations it might yield, be no less delightful than those of several other Mechanical Arts, and of as much use.

To consider it in its most general extent, as the *Erection and Sustentation of Bodies in Fluids*, and from its first Principles, would be necessary to make the Theory perfect ; in order to which, the following Hints may be serviceable to furnish matter for further Enquiries.

The



## *The Translator's Preface.*

The first General Consideration in such a Theory ought to be the Specifick or Comparative weight of Bodies in the respective fluids designed to practice in. From thence may be obtained a perfect knowledge of the forces required for sustentation and motion. When a Body is of equal weight with a fluid, bulk for bulk, it will swim immersed in that fluid, its upper part even with the surface : If it be heavier than an equal bulk of the fluid, it will sink in it ; if lighter, it would float on the surface, as much of it being under the fluid as would equal in quantity a bulk of that fluid of the same weight with the whole Body. Human Bodies are almost of the same weight with water ; the difference or weight of a Man, wholly immersed in water, being not above six or eight ounces, and less in

*The Translator's Preface.*

salt-water than in fresh. Thus Quicksilver being above thirteen times as heavy as water, it would be impossible for a Man, cast into a Vessel or Lake of that, to sink ; on the contrary, the air being 800 times at least lighter than water, it would be very difficult for a Man to mount or fly in that, though perhaps not impossible. A Man being thus of near the like weight with water, Swimming becomes so very easy to him, insomuch that lying on his back without motion, and holding in his breath he cannot sink.

The next Enquiry might be, which of all those various motions he is capable of making with his Arms and Legs, are the most serviceable to the different ways of Swimming. This is our Author's task in the following Treatise, wherein

*The Translator's Preface.*

wherein he shews several ways and methods of managing one's self upon all emergencies. But to determine the business perfectly, recourse ought to be had to Mechanicks, wherein the reasons of the whole are founded. The action of Swimming in Man, like a Boat with a pair of Oars, is nothing but a motion propagated by *Veſtes*, whose

\* *Fulciments*

\* *Fulcrums* are moveable; and consequently all the reasons of it reducible to that of the *Veſtis*, and thence it is easy to find out and determine which motions are best and most expeditious upon all occasions whatsoever, and to demonstrate the truth of them. The consideration of human Bodies, of the management of their Arms and Legs, from the same Principles, in other Arts and Exercises, shew evidently to us the reasons of several

### *The Translator's Preface.*

ral strange and surprising actions, as in Wrestling, Fencing, &c. and at the same time might give us inlets to further and unthought-of Improvements.

The next place among such Enquiries might be allotted to Artificial Swimming. Besides the common helps of Cork and Bladders, &c. that young beginners make use of to learn, there might be invented several small Machines of different uses for different purposes. How easy, and at the same time how useful, might several Instruments be found out that were very little and easily portable, by which one might pass any River, or escape any danger of the water. Girdles of several sorts (whereof I hear of one lately invented, and very useful) might be made for such cases, of any Materials



*The Translator's Preface.*

als that are flexible and impervious to the water, such as oil'd Cloths, and several sorts of Leather. A Cylindrical Case made of oil'd Cloth, and kept open on the inside by Iron rings fastened in it at a moderate distance from one another, so that clapping them together it might go into one's pocket, might be so contrived as to tie round one's Waist, and fastened to keep the water out, and that alone would save from being drowned.

Several little Machines might be found very diverting in Swimming, to promote Expedition, and make the motions of one single Man in the water swifter than any Boat; Contrivances of thin small Planes of Wood with Valves, or otherwise small Hinges, fastened to the Legs or Feet, might be very serviceable

*The Translator's Preface.*

to that end and perform the part of  
Fishes Fins.

The Art of Diving is one of the most noble and useful parts of Swimming, and would deserve a particular Consideration in such a Theory. As to the Artificial or Machine part of it, it depends on other Principles besides Mechanicks. Considerations of the pressure of the Air proportional to the depth, and several other things besides the Construction of the Engines, must be enquired into, which would be too long to discourse of here.

In fine, Enquiries of this nature would prove very delightful to any one capable of them; and without doubt, improvements might be made equal to expectation, since there are certain and infallible grounds to proceed on, and perhaps

*The Translator's Preface.*

haps something or other might happen that would abundantly recompence the time and pains of the Enquirer.

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THE  
P R E F A C E.

*THE Merit or Advantage of any Treatise is not always to be decided by the Title. That of this present Tract has nothing extraordinary to recommend it; it seems only to be calculated for people of mean condition, such as Watermen, Sailors, to whom their Employment has made the Arts of Swimming and Diving in some measure necessary, as also for some others who make use of it for diversion.*

*But to take a stricter and more immediate view of the matter: It must be acknowledged, that the Art of Swimming may be of no small Importance to the greatest Personages and most elevated conditions of life. It seems to have an  
alliance*

## The PREFACE.

*alliance to the Art of Navigation, which is one of the boldest efforts of Mankind: For though the knowledge of the Winds and Compass seem to guard us from the dangers of Shipwreck; yet notwithstanding the Arts of the most skilful Pilots, all Ages have too sadly experienced the hazards of venturing on the Main, and that there needs recourse to other helps to avoid those Perils which Navigators are perpetually exposed to.*

*There is none more present to immediate danger than the Art of Swimming: It would be superfluous to insist on those numerous reasons which might be brought to prove this truth, its self-evidence is more than a Demonstration. Nor is this Art less necessary even for those of all Conditions, even though they never venture to Sea. A person so far from daring to undertake a Voyage at Sea, that he never durst venture into a Pair of Oars, may (in several places) be suddenly drowned in his own house, even then, when he is least apprehensive of it: He never*

## The PREFACE.

ver foresaw the approaching deluge, and if he could have swam, might have avoided the fatal consequence of it. That Traveller who had so happily made the Tour of the World, on his return home was drowned in a small River by a sudden mischance of his Boat running against a Bridge, because he could Swim no farther than to the bottom.

But to shew farther the advantage of this Art, it may not be amiss to take notice of what Consequence it may be in War, and how serviceable it may chance to prove to Generals themselves in the most pressing occasions. Cæsar has left us a very remarkable Example, when finding himself on the point of yielding to the Attempt of Ptolomy the Egyptian King, who had treacherously attacked him in Alexandria, he cast himself armed into the Sea, and by Swimming recovered his Fleet, with which, returning to reward the Treachery, Ptolomy was slain, and Cleopatra declared Queen of Egypt. This single Event is sufficient to shew of  
what



## The PREFACE.

*what use the Art of Swimming may be, down from a General to a common Soldier. It is no ways dishonorable to yield to force, when it would be rashness to endeavour to defend one's self; and he that can safely retreat from an imminent danger, where otherwise he would have been necessitated to have fallen a Victim to his Enemies, may be in a condition to return sufficiently provided to revenge himself.*

*In fine, the Art of Swimming was in great esteem among the Ancients. The Romans solemniz'd it among their publick Exercises; nay, they incorporated a particular Society of Divers, which they called, Urinatories. And Gruterus gives us this Inscription of it:*

*Patrono Corporis Piscatorum & Urinatorum.*

*And there yet remain these Old Characters on one of the Gates of Rome.*

FL.

## The P R E F A C E.

FL. ANNÆO LEMONI FORTU-  
NATO PISCAT. URINATORI  
Q. Q. III.

*Every Man of War had its particular Diver, whose Charge was to take care of the Anchors and Cables, the same with that of our Boatswains.*

Pliny tells us in the Second Book of his Natural History, that they had a method of using Oil under water for a freedom of respiration, and managing of it so, as to make it serviceable also for lighting them there.

According to the Testimony of Elianus, in the Fifth Book of his History, they were used to blacken the soles of their Feet, and the Palms of their Hands, to avoid the Fishes, to whom the glistening of those parts in the water give notice. In Diving they went down with the head foremost, and turned themselves under water, holding their breath, because thereby the Body becomes lighter.

Some

## The PREFACE.

*Some would Swim thus the length. of Eighty Furlongs together without being perceptible to any one ; which is very considerable, and somewhat difficult to believe, each Furlong being 125 Geometrical Paces, or 625 Feet, so that the 80 Furlongs of Greece were  $10\frac{1}{2}$  Miles English measure ; this surprizing force and activity of those Divers seems to be a little fabulous.*

*They had for their share the third part of whatever they brought up from the bottom, when the depth was not above eight Feet ; and one half, when it was fifteen Feet deep.*

*Their Assistance was also very considerable in Naval fights, wherein they cut the Cables under Water of their Adversaries Ships. Dion Cassius reports in the Life of the Emperor Severus, that the Byzantines, at present the Constantinopolitans, having been besieged during three Years, by almost all the force of Greece, after having in vain essayed several*



## The PREFACE.

*ral Stratagems, at length resolved to attack their Adversaries Fleet with their Divers, who cut all their Cables under water, and having fastened them to some Cables of their own Ships, carried off those of the Enemy without their Men, which obliged the Grecians to raise the Siege.*

*These Divers were not less necessary in close Engagements, and in Boarding one another's Ships; they would lay hold on their Adversaries, and together along with them, fling themselves over-board, and so drown them. Manilius the Poet, in his Fifth Book of Astronomy, speaks of a certain Phocian, very excellent in those sorts of Engagements.*

*Both the Grecian and Roman Histories are full of Narratives of the Undertakings of these sort of Divers. But to come to our times, it is most certain that the Indians, and the Negroes, excel all others in these Arts of Swimming and Diving. It is to them the Ladies are obliged for their Ornaments of Pearl; they are the Divers*  
*who*

## The PREFACE.

*who fish for them ; they are also very useful for recovering Anchors and Merchandizes that have been cast away.*

*The Chinese are not much inferior to them in this sort of Exercise, they extremely apply themselves to it ; they have whole Floating Towns, which they build upon Reeds, and the Houses joined together, and likewise Streets and all other Appurtenances of Towns on Land.*

*I might further enlarge on this Subject, but the brevity I design in this Treatise, will not admit of a long Preface ; I shall conclude with telling the Reader, That this is the first Treatise of this kind that has ever appeared in the French Tongue, nor do I know of but two that have in any other, the one of Everard Digby an English Man, whereof I have here made some use ; the other of one Nicholas Winman a Dutch Man. I wish what I write hereon may be acceptable to those who are curious on this Subject ; and that is the sole End any honest*  
Author

## The PREFACE.

*Author ought to propose to himself in what he does, which, whatever it be, deserves no further applause from the Publick, than it is found either useful or diverting.*



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OF THE  
A R T  
O F  
S W I M M I N G.

---

*That there is such an Art, as that of  
Swimming, and what is to be observ-  
ed before ore enters on putting the  
Precepts of it in Practice.*

**W**HILE one reflects on those  
many and frequent Acci-  
dents, which through want  
of Swimming daily happen amongst us ;  
every one is ready to complain of the  
unhappiness of Man in that respect, in  
com-

comparison of other Animals, to whom Nature has indulged that faculty, which he ought to enjoy in a more excellent degree, since it is so necessary to his Preservation. But if we thoroughly consider the business, we shall find nothing more unreasonable than that complaint, since without doubt Man would not only Swim naturally like other Creatures, but also in more Perfection, and with more Variety, both for Pleasure and Advantage: otherwise there would not so many acquit themselves that way with such an admirable dexterity and address, as we daily see, which sufficiently demonstrates, that Man has naturally all those Dispositions which are requisite and necessary for it.

But it may be objected, if Man has naturally all the requisite Dispositions for Swimming, how comes it to pass that all Men do not swim alike? To this it is easy to answer (which is beyond all doubt true) that they would Swim all alike without any distinction, and all equally share that happiness, which is  
as

as natural to them as to other creatures, were they not rendered incapable by those internal motions, which they don't sufficiently make themselves masters of as they ought ; such are those motions of Fear, of Impatience, of Precipitation, &c. which make them unfit to make use of those perfections which they possess. For testimony of this truth, we find that those in all Ages whom their Courage has exempted from these natural Remora's, have Swam from their very first attempts, and performed extraordinary and surprizing actions, which is not uncommon now-a-days among those who imitate them. Of the agility of the one and the other sort, at length an Art is formed, reducible to certain Rules, such as you will find in this little Tract, and which being put in practice by frequent Use and Experience, one may attain to the habit of Swimming perfectly.

This Art, which may be numbered among the Mechanick ones, since it is performed by Motion, and the Agitation

B

tion



tion of the Hands and Feet, has been hitherto exercised rather by a rude Imitation, than the Observation of any Rules or Precepts, by reason no one has taken the pains to reduce it to any ; although it has always sufficiently deserved it, by the great advantages it brings to those who possess it, and in general to all Civil Societies, the consideration whereof ought to have made Men study to render it more easy to be learned, and more familiar to all Men, since they may have so great occasion for it. For we ought not to look upon it as people commonly do, (*viz.*) as barely to Swim, turn about in the Water, dive, &c. to create admiration in the Spectators of the Swimmer's activity. Its end is far more noble, and the consequences of it so very considerable that none ought to be ignorant of it, especially since Life itself is concerned in it, and the Preservation of it, from those Dangers to which those are liable who cannot Swim.

To mention some few Advantages of Swimming. In Case of Shipwreck, if one

one is not very far from the Shore, the Art of Swimming may set one safe there and so save from being drowned. In case of being pursued by an Enemy, and meeting a River in one's way, you have the advantage of escaping two sorts of death, by gaining the Shore on the other side, and so escaping from your enemy, and from being drowned in the attempt of doing it.

But a good Swimmer may not only preserve his own Life, but several others also. An open vessel on the main sea, in a Storm may be kept from sinking by a good Diver : Or having lost her Anchors and Cables, and being ready to be cast on the Shore, may by him be haled thither, and avoid being dashed against the Rocks, and so the Lives of all in it saved ; and the occasions of being thus helpful are only too frequent, as those who are used to the Seas very well know. By the same means one may attack an Enemy posted on the adverse sides of Rivers, and thereby sometimes gain a Victory. And those places which are environed

by water are no more in safety when assaulted by such besiegers.

It is from these Considerations which we have here mentioned, that the Art of Swimming ought to be esteemed, rather than from the Pleasure and Diversion which is commonly proposed by it : insomuch, that besides the interest which particular persons may gain by learning it, and perfecting themselves in it ; it seems worth the while to erect Publick Academies, and establish Experienced Masters in them to teach it, since the advantages of it may be so considerable. It will be found more easy to learn than it has ever been heretofore, by observing the Precepts here laid down, by which those Difficulties may be avoided which use to deter young Beginners.

It may be objected, That of a vast number of persons who are expert in Swimming, there is not one acquainted with these Rules, and so the same Difficulties remain as before. We will agree to the truth of this Objection ; but among these persons there may be several,

several, who are not only capable of thoroughly understanding these Rules as soon as they read them, and applying them to what they had before learned by Chance, or Imitation of others ; but also to improve them, by adding to them what they may have found out by their own Experience, and so digesting and teaching the whole in an easy and methodical order. Such persons ought to be sought for and encouraged by rewards, and we are persuaded that if there was any such one expert and dextrous that would publickly profess to teach it, he need want no Scholars nor Encouragement.

There is no Season wherein a man may not have occasion to practise the Art of Swimming ; but any season is not proper to learn it in. That time of the year is (without doubt) the best, wherein people follow the Baths, or Swimming for their diversion, or to retain the habit of it ; that is, in the Months of *May, June, July, and August*, especially in our Climate, where the water is often prejudicial to the



Health at other times. There are also some Anomalous Years wherein it is not healthful to go into the water at all times in those four Months, as when the Weather is colder than ordinary for the Season, and consequently the Water. He that learns to Swim, ought to have his Animal Spirits at perfect liberty and command, which cannot be when the more than ordinary coldness of the Water forces one even to Shake and Tremble. It would be superfluous to add, That one ought not to go into the Water when it rains, for besides the Rain (if it lasts any time) chilling the Water, it hinders from Swimming freely, and endangers catching colds by wetting one's cloaths.

The night is also improper for this Exercise ; and weeds that may entangle the feet, are also obstacles among the rest, that ought to deter any prudent person from venturing among them, especially considering, that although you have company with you, yet you may be lost beyond any possibility of help.

You

You ought likewise to take care that the shore (or bank of the river) where you strip, be not dirty, or muddy, that you may not dirt or foul your feet at going out: You ought also to take heed where the grass or weeds be high, for fear of Snakes, or Toads, or other venomous animals, but that it be a plain even turf, neat and clean, that you may keep your feet so in returning to your cloaths.

Before you go into the water, you ought to see that it be clear, that there be no scum or froth on the surface, what sort of bottom it has, that there be no weeds or mud, for one's feet may be entangled among the weeds, or one may sink into the mud, and the water coming over one's head, remain there, and be drowned. This may happen to the best Swimmers, by reason that by how much the more they endeavour to disengage themselves, they are so much the more liable to sink. The bottom ought to be of Gravel, or smooth Stones, so that you may stand thereon as firmly as on the Earth, and be nei-

ther in danger of sinking in mud, nor wounding the feet. Care ought also to be taken that it be even, and without holes ; and above all, that you know the depth, especially when you begin to learn ; for as it is then easy to tire one's self in struggling and making the first efforts, so you must be sure that the bottom is not out of your depth, when you have occasion to rest and take breath. It is impossible to be too cautious when you are alone, and have no one in company that knows the place already ; or if you have not seen others Swim there in the same circumstances without danger. Moreover, it will not be amiss to observe, That when you have found out a place fit to learn in, that you don't venture any where else till you are a perfect master of your Art, and till then it will be the best way not to exercise without a master, or some one who is very expert in Swimming.

Something yet remains to be observed before you enter into the water, in regard to stripping yourself. If you  
sweat

sweat when you come to the place you have chosen; or if you have sweat some time before you came, and are not quite cooled, you ought to strip by degrees, and that in walking to and fro on the shore, so that you may recover a good temperature, and by thus gradually stripping, the pores have leisure to close, and the body become in good condition, to be exposed to the air without any detriment to the health. After which you may enter into the water, and Swim according to the following precepts.

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OF THE  
A R T  
O F  
S W I M M I N G.

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I.

*Of the Manner of entering into the  
Water.*

**T**HOSE who do not know how to Swim, ought to enter by degrees, and gently, into the water; but those who are expert, oftentimes leap in all at once, with their feet perpendicular to the bottom, as is represented

presented in the first figure: sometimes after having walked a little way in the water, they lie along stretching out the body and arms, as you may see in the second figure. Others holding their right hand, or both hands behind their neck, from the bank cast themselves in head foremost, striking the water with the calves of their legs one after the other, as in figure 3.

There are some who after a short race fling themselves into the water on their right or left side, as in figure 4. Others taking several leaps towards the bank of the river, at last leap in with their feet foremost, body upright, meeting the water first with their buttocks and calves of their legs, as in figure 5. This way is very safe, and the best of all.

All these ways of entering into the water seem to be very well and pleasant; nor can I find any thing inconvenient in them, except it be, that those who make use of them run the hazard of taking in water at the nose and ears as they go down into it; but that may  
be

be avoided by holding in the breath. It sometimes happens that those who are less expert, go down quite to the bottom, which is inconvenient, by reason of sometimes striking against it, and that in a great depth you are obliged to hold your breath a great while. But you may remedy that by turning on your back as soon as you begin to approach to the bottom; for you will cease descending as soon as you begin to turn yourself. The coldness of the water is somewhat troublesome and painful at first, but in a little time you will find use will take that off.

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## II.

*To begin to learn to Swim.*

AFTER he who is to teach you to Swim, shall have fathomed the depth of the water, or you yourself have found it by means of some Staff or Plummets, to put yourself in a right  
Posture



Posture for Swimming, lie down gently on your belly, keep your head and neck upright, your breast advancing forward, your back bending, withdraw your legs from the bottom, and immediately stretch them out again; strike out your arms forwards, and spread them open, then draw them in again towards your breast; strike forwards, making use first of your feet, then of your hands, as many strokes as you can; you will find this way easy and pleasant. I have been used to persuade those whom I have taught to Swim, not at all to fear lying along on the water when they know the bottom. It will sometimes happen that you will be forced to drink down a great deal of water, and put yourself to a great deal of trouble and pains without much advancing in the Art; but that ought not to discourage you, nor need you fancy to yourself that you are not as capable of learning and Swimming well as others, for the same things happen almost to all beginners; for it is common at first learning, in lying along on the water to  
sink

sink down, and be ready to be stifled in holding one's breath. It is usual at first for these reasons to administer sundry helps; as to hold up their chins, or give them a bundle of cork, or bladders or reeds, which are the best helps for beginners.

Take special care that the water be not higher than your breast, nor shallower than up to your belly. Figure 6.

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### III.

*How to return back again in Swimming.*

**T**O turn back, you must turn the palm of your right hand outwards from you and strike out the arm the same way, and do exactly the contrary with your left hand and arm, striking that inwards the contrary way, embracing as it were the water on that side. Thus you may turn yourself also on the left side, after having inclined your head, neck, and the length of  
your

your body to that side. The 7th figure will make you more easily comprehend the manner of it.

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## IV.

*To Swim with the Head erect towards Heaven.*

**T**HIS way seems difficult, though it imitates that posture they say is natural to man, to look upwards; and if we knew how to make use of it, there would not be so many drowned as there daily are; for that happens, because, instead of looking upwards, they look downwards with their heads towards the bottom, and embrace the water, as it were with their arms, in so much that one might say they did all they could on purpose to drown themselves. If they would place themselves on their backs, and keep their bodies extended, they might easily escape, nay could not sink themselves in that posture if they would; this we find attested by  
experience;

experience; and I never yet met with any diver that could possibly descend in that posture, that is, with the head erect towards Heaven; and if they had a mind to it, they found themselves first obliged to elevate their arms upright to contract their thorax or breast; and when all this is done, find it very difficult to sink, though very slowly, and always come to the bottom with their feet first. But to learn to Swim on your back, observe what follows.

When you are upright in the water, lie down on your back very gently, elevate your breast above the surface of the water and in the mean while keep your body always extended in the same right line, your hands lying on your belly, striking out and drawing in your legs successively, and keeping them within two feet of the surface of the water, and govern yourself according to figure 8. It is true there will always be great part of the head under water, which makes most tender pates not much care for this way. Notwithstanding which, it is the most easy and safe of any way



way of Swimming, and that wherein one may continue longest, for it least tires, and one is not forced to drink so much water this way, as when Swimming on the belly ; besides, one more easily cuts through the waves this way, and runs not so great a risque of being entangled among weeds as on the belly. At the beginning it will appear difficult, and one can scarce forbear using his hands. The best way to begin will be by the assistance of some other hand, or a bundle of corks or bladders ; you have nothing to do but to lie down gently and take especial care that you do not through fear put down one of your legs to feel for the bottom, for you need not fear sinking, and that motion of the foot is the way to make you do so. You must also take care not to lift your knees too high, nor sink your hips and sides too low, but keep your body extended in the same strait line as I have already shewn. If you have a mind to turn any ways, and you are not yet very expert, you must turn in Swimming and taking a round or circle ;  
or

or also whilst the one leg lies still, embrace the water next beside you with the other ; thus you will find yourself to turn on that side on which your leg by its motion embraces the water, and you may turn either to the right or left, according as you make use of the right or left leg for that purpose. Swimmers ought to be acquainted with several ways of turning themselves backwards, or to one side, as occasion shall require, to avoid meeting boats, weeds, rocks, or shores, and a thousand other accidents. There are several ways of doing it, I design here to shew them all ; and first that way which is called the *Easy Turn*.

## V.

*How to turn in the Water.*

**T**O turn easily you must incline your head and body to the side you would turn to, and at the same time move and turn your legs after the same manner, as you would do to turn the same way on land, this hinders and stops the motion of your body forwards all at once. Figure 9.

If you would turn to the left, you must turn the thumb of your right hand towards the bottom, and with the palm open, but somewhat bent, drive off the water foreright from that side, and at the same time, with the left hand open, and fingers close, drive the water on that side backwards, and at once turn your body and face to the left. If you would turn to the right, you must do just the same things contrariwise. If any one ask of what advantage this turn may be ? its use is very great in retiring from dangers that  
may

may happen. As suppose you met any floating timber, or any thing else that you were obliged to avoid. It is also useful for helping others that are in danger. But you must take especial care that, in turning after this way, your legs are not open, and that you have water enough, for fear of hurting your back parts against the ground.

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VI.

*The Turn called Ringing the Bells.*

**T**HIS way of turning is at least of as great use as the precedent. You have no need of much room for it, and may do it either Swimming on the back or belly, and you go contrary in the one to what you do in the other. If you Swim on your belly, you must at once draw in your feet, and strike them out forwards, as you did before backwards, at the same time striking out your hands backwards, and putting



putting your body in an upright posture.  
Figure 10.

If you Swim on your back, you must at once draw in your legs towards your buttocks, and striking them down towards the bottom, cast your body forwards till you are turned on your belly; but you must take heed that you have water sufficient, and that there are no weeds at bottom, which have sometimes proved fatal to the best Swimmers.

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## VII.

### *Another Way of turning or rolling round.*

**T**HERE is another way of turning from the right to the left, and contrariwise, as a globe does about its axis. If you Swim on your belly, and would turn to the left, you must extend your right hand and arm as far out before you as you can, and turn your face, breast, and whole body, to the left, lifting up your right hand towards the  
top

top of the water, and you'll find yourself on your back, and from your back you may turn again on your belly, and so as often as you please. And to the end those changes of postures may be performed with speed and agility, you must take care to keep your legs close together, and your arms must be stretched out right before your breast, but not separated far one from another. The Figure and practical part of this way of exercising will make you more easily comprehend the business than any rules in words can.

---

VIII.

*To Swim on the Back.*

**A**Lthough there is not much occasion for any great motion of the hands for those that Swim on their backs; yet if you design to make any great advances forward, you must use  
both

both your feet and hands too. This way is chiefly useful for Swimming against waves, and carries swifter than Swimming on the belly. The thirteenth figure will make you comprehend this method better than any lessons we can give you in words.

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## IX.

*To Swim backwards.*

**W**E go backwards, when lying on the back we push ourselves onward with our feet and legs; but to do the contrary, and advance forward, we must, lying always on the back, keep the body extended at full length in a strait line, the breast inflated, so that that part of the back which is between the shoulders, must be concave (or hollow), and sunk down in the water, the hands on the belly. Being, I say, in this posture, you must lift up your legs one after another, and draw them

them back with all the force you can towards your hams, letting them fall into the water, for thus you will return to the place whence you came. This way is not only very pleasant, but also when you find yourself weary sometimes with Swimming, and far distant from the shore, it may be useful to rest yourself, and give you time to recruit your spirits.

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X.

*To turn one's self, lying along.*

**I**T seems at first sight as if to turn one's self, and turn one's self lying along, were the same thing; but if you inspect the matter more nearly, you will find that in the seventh Section you turn your body very quick about; but to turn lying along, you must keep yourself in a posture extended and lying on the back, the top of your arms close to your sides, turning  
C the



the lowest joint of your right hand outwards ; the legs at distance one from another at least a foot, or thereabouts, the soles of your feet turned towards the bottom of the water. In this posture you may turn, as you please, towards the right or left side. This may be serviceable in several rencounters ; for it often happens, that a person Swimming on his back, may be forced against a bank, or among weeds ; wherefore a ready way of turning is very proper to avoid those sorts of dangers. But notwithstanding these methods of escapes, it is not safe to venture among such sorts of dangers, especially weeds ; for some time or other one may be caught. There is another way of disengaging one's self from weeds, which I will shew in the following Section.

## XI.

*To make a Circle.*

**T**H E Circle (or entire Compass) is made, when one foot remaining immoveable, the other turns round, and describes a Circle, ending where it began: In the same manner the head may remain immoveable, while the legs strike the water, and make the body turn round. To perform this, the body, lying on the back, if you would begin to turn from the right to the left, you must first sink your left side somewhat more towards the bottom than the other, and lift out of the water your legs successively, first the left, then the right, and at each of these motions advance your legs onwards about a foot each, towards the left side, your head remaining still in the same place; the froth on the surface of the water will note the parts of

the Circle you have described. This way may serve to remove any thing from one's head (or feet) that may offend, which too often happens in the water. In the practice of it you must take care not to elevate your feet too high in the air, for that would sink down the head in the water; nor to strike the water too hard with your feet, by reason it causes a disagreeable noise.

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## XII.

*To turn one's self in the Water, being in an upright Posture.*

**B**EING in the Water in a posture upright, you may turn and view every thing successively round about you. You may see that I am indeed upright, but to make you understand those motions of my feet which you cannot see; suppose I have  
a mind

a mind to turn to the right, in the first place I do, as it were, embrace the Water with the sole of my right foot, and afterwards with that of my left, and in the mean while I incline my body towards the left; I also draw as much as I can the Water towards me with my hands, and afterwards drive it off again; I draw it first with my left hand, and after with the right, and having so drawn it towards me, drive it off again. This manner of swimming may be very useful; it is very serviceable to know what happens on every side. Suppose you are in the sea, you may this way find a place to land on, or where to attack an enemy that might happen to follow you, or avoid his attacks; or if you have a mind to fight him in the Water, it shews how to do it to most advantage, and to turn yourself on all sides. There are several other different manners of turning one's self in the water, and among them some that are very cu-



rious and pleasant, but are only for those to practise that are very expert in this Art.

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### XIII.

*To advance forwards in Swimming, with the Hands joined together.*

**T**HIS is one of the first and most simple ways of Swimming, and is also very graceful. In the practice of it you hold your hands joined together, drawing them in towards the breast, and successively striking them out again. The two hands remain all the while joined, insomuch that the thumbs and fingers being turned towards the surface of the water, seem to be out of it. Besides the gracefulness of this way of Swimming, it is moreover serviceable for traversing, or Swimming cross a heap of weeds, &c. for the hands being thus joined as it were

were in a point, open a passage for you through weeds or reeds, if they chance to oppose you, especially if you take care not to strike your hands out too far.

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XIV.

*To Swim neither on Back nor Belly.*

**S**UPPOSE you Swim on your Back, or Belly, lower, or sink your side, and at the same time elevate your right one. In Swimming, when you are thus laid, move your left hand as often as you see convenient, without either separating it far from your body, or sinking it, perpetually striking it out, and retracting it, as in a right line on the surface of the water. Besides the pleasure of Swimming thus, you may also find an advantage by viewing as you please either side of a river, and that one side may rest while the other is employed.

## XV.

*To Swim on the Belly, holding both your  
Hands still.*

**T**HIS is easily performed in manner following. You must keep your breast advancing forward, your neck upright on the water, both your hands fast behind your head, or on your back, while in the mean time your legs and thighs push you forward by the same motions you make when you Swim (as at other times) on your Belly. This way of Swimming may be useful, in case any accident, as the Cramp, &c. should happen to your arms, or if you were forced on occasion to Swim with your hands tied behind you, or in case you were a prisoner, and your life or liberty depended on it. The same thing may be performed by placing yourself on the Back, but the other way is most advantageous, because  
you

you may see your way before you ; and those that Swim on the Back are obliged to turn themselves often for that purpose. Besides, the hands are here at rest, but must be employed if you turn yourself on your Back.

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XVI.

*To carry the Left Leg in the Right Hand.*

**T**HIS is performed, when, in Swimming on the Belly, you lift up your Leg, and moving it towards the buttocks, you take hold of it with the hand of the opposite side, continuing in the mean while to Swim with the Leg and other hand which are at liberty. This method may be serviceable in cases of the Cramp or Gout, or if one Leg should be entangled among weeds ; for by this manner you may easily break through them ; but if you



should chance to find yourself engaged wholly among weeds on every side, the following method will be most proper.

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## XVII.

### *To Swim like a Dog.*

**Y**OU are not to imagine that this way is difficult, for it is so far from it, that several who never knew how to Swim before, by practising of it by chance, have kept themselves above water. To Swim like a Dog, you must elevate or lift up and depress one hand successively after another, and do the same also with your feet, only with this difference, that with your hands you must draw the water towards you, and with your feet drive it from you; you must begin with the right hand, and right foot, and afterwards with the left hand and foot, and so successively. This way of Swimming

ming is very useful, for disengaging one's self from weeds under water. But here follow other more easy methods to avoid the same danger by Swimming on the Back, whereof the first is very pleasant.

*The XVIIIth Chapter is the same with the XVth.*

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XVIII.

*To beat Water.*

**Y**OU strike the Water with your right and left legs; the manner of it is very pleasant, when Swimming on the back, at each extension of the legs, lifting them up out of the Water one after the other, you strike the Water so that it rebounds up into the air. Those who are most expert at this, bring their chins towards their breast at each extension. There are some

who not satisfied with going so far only, to perform the business more gracefully, lift up their legs much higher than others, strike the Water, each extension, sometimes with the right leg, sometimes with the left, and at the same time turn the whole body. This is the most agreeable manner of all the rest. To perform this, you must keep your body extended on your back, expand or inflate your breast, and keep it almost out of Water, the palms of both your hands extended and turned towards the bottom, for it is the office of the hands to keep up the body while you strike and open the legs; but at the same time you have a mind to beat Water, and turn your self, in that case supposing your right leg is up out of the Water, you must strike the Water with that, and at the same time lift up the left leg, and by the same action turn your whole body. This agility makes Swimming very easy, and does not require so much force as the following.

XIX.

*To keep one Foot at Liberty.*

THESE easy ways of Swimming, or rather refinements, seem more for diversion than advantage; yet notwithstanding there is not one of them but what may be serviceable in some of those numerous rencounters which happen to Swimmers. As for example, This may serve to disengage one's Feet from weeds, and that after a free fearless manner, which shews the Swimmer to be master of his Art. He turns himself sometimes to the right, sometimes to the left, having always one leg up out of the water, looking about him, bringing in his chin always towards his breast. It is more difficult than it seems to be at first sight; for if the breast is not inflated, the palms of the hands extended, and turned downwards toward the bottom, and if the other  
leg



leg is not employed in the water ; in short, if you miss of any of these things your head immediately sinks down : Thus the address, or management of it is difficult ; but the recompence (when learned) satisfactory and very useful, as I have shewn in disengaging one's self from weeds. Here follows another method more easy.

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## XX.

*To shew both Feet out of the Water.*

**O**NE may Swim holding both Feet out of the Water, and this is very easy : You may also not only remain so in one place, but also make advances forwards. You must place yourself on the back, and bend the small of it, contrariwise to what is practised in other ways of Swimming : your hands must be on your belly, the palms of them open, moving them to and fro, like oars, which must sustain your body

dy while your Feet are shewn. This way of Swimming will serve to shew you whether your Feet are clean or not, after having taken them from the bottom.

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XXI.

*Suspension by the Chin.*

**Y**OU cannot easily imagine how this manner of Swimming is performed, it is indeed very surprizing. By this means you may stand upright in the water though never so deep, without fear of sinking. To make you comprehend it, you are to remember, that when you Swim on your back, you lie still, your legs being extended: When you find your self in that posture, you must let your legs go down or sink; and when they come to be perpendicular to the bottom, you must take them up again, bending your knees,

knees, inflating your breast, and as to the arms and hands, whereof the back parts lie flat on the water by the shoulders, you must sometimes extend them on the one side, sometimes on the other, sometimes shut them, turning the palms towards the bottom, the fingers close to one another, holding your Chin as upright as possible. This way, which seems so surprising, is sometimes very useful ; suppose at any time, the ice should happen to break under your feet, this way will be of vast advantage to secure yourself from the danger. It may also be very advantageous in case a man is obliged to save himself from some enemy pursuing, by leaping into the water in a dark night ; for in that case, one may wait, without making any noise, till he is passed by, and then go again on shore.

XXII.

*To Tread Water.*

**B**Y this way you remain upright in the Water without making any motion with your hands, only you move the Water round with your legs from you, the soles of your feet being perpendicular to the bottom; you may make use of this if you are cast into the Water bound hand and foot. Swimming on the belly is also serviceable in this rencounter. This way of Swimming is very advantageous, for it leaves us the free use of the hands. One may make use of it in defending one's self; but it ought not to be practised where the bottom is full of Rushes or Weeds, for they may entangle one of the legs; and in such case you may use the method following.

XXIII.



## XXIII.

*Changing Hand and Foot.*

**W**ITH the right Hand you hold the left Foot, and contrariwise; but you must change those holds by a speedy letting or striking down the Foot held up. This may be useful for taking of weeds from the legs, and freeing them when they are both engaged amongst them.

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## XXIV.

*To Swim having the Legs tied together.*

**T**HE Legs being bound either by Weeds, or otherwise, you must turn on your back, and lay your hands across on your breast, for in that posture you may gain the shore, by striking your legs one against another, and

and holding them up as much as you can.

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XXV.

*To Creep.*

**T**HE action of Swimming in Man, is very like the motion of Creeping in reptiles; as suppose a Snake, for example, who resting or stopping first, with his fore parts, draws the rest of the body towards them; and it is a way very serviceable to get clear of weeds. To practise it, being upon the belly, you cast your hands forwards, and your feet softly backwards, but close together, and thus you advance, extending your arms and hands as far from your breast as possible, your fingers close, and the palms of your hands a little bent, turned towards the bottom; for being in this posture, if you draw towards your breast with your hands  
and

and arms, the water that is before you, by that you give time to the rest of your body to advance further, and to disengage yourself from the weeds, if you are entangled in them, which must not be done with too much haste or force ; for if you strike out your hands and arms too vigourously, you will entangle yourself more among them, and when they have once caught you fast, you are in danger of perishing, if timely help does not come to relieve you.

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## XXVI.

*To Sit in the Water.*

**E**XPERT Swimmers can do whatever they please in the Water ; they can walk there, stand still upright, or lie still, or sit down. To Sit, you must take both your legs in your hands, draw in your breath, and

and so keep your breast inflated ; your head upright, and lifting up successively your arms and legs, by that motion sustain yourself, as the figure shews. This way may be serviceable to pluck off weeds, which may happen to entangle and hang about your legs, as also to sustain or keep one's self above Water in places where there is not room enough to Swim, or the ground muddy, or otherwise disobliging to the feet, so that you care not to set them down.

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XXVII.

*To cut the Nails of the Toes in the Water.*

**I**T is possible to perform actions in the Water, which one cannot do on land: I myself have often brought my Great Toe to my lips in the Water, which I could never do on land,  
nor



nor on my bed. You must hold your knife in your right hand (if you are right handed) and take up your left leg, and lay the foot on the right knee; there you may take it from the left hand, and with the right cut your Nails without any danger. Thus you may also pick your Toes; and if this way has no other use or advantage yet the dexterity of the management may serve to recommend it.

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## XXVIII.

*To shew out of the Water four Parts of the Body.*

**T**HIS manner shews at once four parts of the body, viz. the Head, the two Elbows, and one Knee; you lift up one knee, and place it upon the other by turning it, while in the mean time you lift up and depress

press the other successively, keeping in the interim your elbows elevated, your breast inflated and elevated as much as possible, and all lying on the back. Besides the management of this method, and the difficulty of doing it well, it is serviceable to rest yourself by putting one thigh across the other, and to take breath where the Water is so deep that you cannot reach the bottom.

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XXIX.

*To Swim holding up one Leg.*

**T**HIS way seems at first sight to be the same with that of shewing the feet out of the water, which we have already taught, but it is very different from it; for while you hold up one of your Legs, both your hands must embrace and gather together (as it were) the waters, striking them under

under you, and driving them off ; the other Leg must not be lifted up above half way, beating the water frequently therewith by quick and short strokes. This is an easy way to carry any thing from one side of a river to the other, by fastening it to your great Toe : but you may perform the same thing more easily as follows.

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XXX.

*To Swim holding up your Hands.*

**W**HILE you Swim on your back, it is easy to put your hands to what use you please, but it is difficult to hold them upright, and Swim at the same time too. It would appear at first sight as if this were the most easy of any method we have yet taught. You must take care lest while you lift up your arms, the thorax or breast be not contracted, for so you sink. The whole Art of this way

way of Swimming consists in heaving up the breast as high, and keeping it inflated as much as possible, while your arms are held up.

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XXXI.

*To Boot one's self in the Water.*

**I** Call this way by the name of Booting or drawing on one's Boots, because the action very much resembles a man doing so. You must first lift up one leg out of the Water, and afterwards the other, and take the foot in your hands as those do who are drawing on their Boots, and presently after let it go again, extending it out at length. The management of this way consists in keeping up your Breast as high as you can, and as much inflated as possible, and also the one leg up out of the Water while the other is continually playing downwards. This

D

way



way may be very commodious for cleaning your feet from mud, &c.

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### XXXII.

#### *The Leap of the Goat.*

**I**T is called so by reason you imitate the Leaping of Goats in the motions of the feet. To perform it you must have both courage and strength. You must keep your breast inflated, and strike with both your hands the water on each side, by thick short strokes three or four times, but more forcibly the last time than the others : while you are doing thus, you must lift up your feet quite out of the water, and rub them one against the other, as you see commonly done in cutting of capers. This is one of the most difficult but most ingenious pieces of Art belonging to Swimming, and when you are arrived to it, you may say you have mastered one of the most difficult

difficult points in the whole Art : For it is as difficult as to Swim under water, to which there is required a great deal of artificial management ; which now I come to shew, as far as I am acquainted with it. The first step is to learn to Dive.

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XXXIII.

*To Dive.*

**I**F men sink to the bottom of the water, it is their own fault, nature has laid no necessity on them of doing so ; nay, there is not only occasion for force and strength to come thither, but also Art to do it safely, speedily, and handsomely ; but those who are expert at Swimming do it, on occasion, as swift as an arrow, and descend perpendicularly or obliquely as they please. The first way of doing it is, to begin standing on your feet touching the bottom ; then afterwards

D 2

rise

rife up, your head bowed down, fo that your chin muft touch your breast; the crown of your head being turned towards the bottom, holding the backs of your hands clofe together, right before your head, and finking or ftriking them down firft with all the fwiftness and exactness you can; thus you may Dive to the bottom, and this is the first way I ordinarily teach.

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## XXXIV.

*The Perpendicular Descent.*

**T**HIS is proper for those who leap off from any height into the water, as from a Bridge or Ship: This is performed by taking a leap a little forwards, and sometimes upwards, that your descent may be more perpendicular and swifter to the bottom, and also that your head may go perpendicularly downwards. This way is very commodious, when you have a very deep

deep water, and it cannot be performed after any more ready method, because of the difficulty of long holding one's breath. However it is seldom put in practice by reason of the dangers which attend it : But the following method is free from danger, and also otherwise pleasant.

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XXXV.

*To Swim under Water.*

**I**N the first place you are to determine whether you are to Swim at the bottom of the water or near the surface, or in the middle between both. You first of all dive down; the two hands must be turned back to back, and close to one another; after which you must extend them with all the swiftness you can, your thumbs turned upwards, and your fore-fingers towards the bottom; and if you have a mind

D 3 to



to descend yet lower, you must as your hands are extended still strike them down lower in the Water. If contrariwise you would re-ascend towards the surface of the Water, you must keep the palms of your hands open, and your thumbs towards one another, as when you Swim on your belly, the palms of your hands being towards the bottom, and your two thumbs, as I have just now said, towards one another.

He that would Swim in the middle, or between top and bottom, must grasp with both his arms the Water before him, attracting it towards him, keeping in the mean while his thumbs turned more towards the bottom of the Water, than the rest of his hands. You may have occasion to Swim thus, when you are to seek for any thing at the bottom of the Water, or to pass unseen from one shore to another; sometimes also to help one in danger of drowning. But in this last case you must take heed not to come too near neither under Water, nor on the surface, to any one in that danger; for if such an one  
takes

takes hold of you, you are certainly lost.

To proceed therefore in that case safely, you must keep at a distance, as ten or twelve feet off; your best way will be not to lay hold on him till he is quite sunk down, and lost the use of his sight; and if you have observed the place where he is, you may endeavour to take hold of him by the hair, and so draw him on your back, taking always care that he does not lay hold on you; or otherwise hamper you; you may thus draw him to some shallow place; or if you have any string or rope about you, leave one end on shore in hands of your companions, and fasten the other to him, and so let them draw him out.

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XXXVI.

*To come to the Top of the Water again,  
after having dived.*

AFTER you are at the bottom, you may return with the same facility; which is performed much after the same

same way as we have taught before, to turn one's self in the Water; the person who Swims with one of his hands extended, must push from him the water before him with his palm, and with the cavity of the other palm drawing the Water that is behind him, towards him; when your hand is extended as far as it can be, the fingers of the hand so extended, and the palm of that turned outwards, ought to shut or clench: the perfection of this way you'll see as follows.

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### XXXVII.

*In Swimming under Water to make a Circle.*

**W**HEN Swimmers go to search for any thing in the Water, they Swim round about the place where the thing was cast in, if they do not find it immediately; by this sort of address they can take up any the least thing that is at the bottom. The manner of making



ing this compass or Circle is thus: If you would begin the Circle from the right hand, and end it at the left, you must grasp or embrace the Water with both your hands from the right to the left, and exactly contrary if you would turn the other way; but when you have Dived perpendicularly down, and cannot find what you went to seek, you will be obliged to take such a compass, but do not go so far as to lose the light; for when once that begins to fail you, it is a sign you are either too deep, or under a boat, or shore, or something else that intercepts the light. You must always take heed of venturing into such places; and if you should find yourself so engaged, call to mind whereabouts, or which way you came thither, and turn back the same way, looking upwards for the light; for you may see it a great way off; above all, take heed that you do not go to breathe under water: In case you are afraid that any enemy should lay wait for you when you come up again, you must have recourse to the Agility of the Dolphin.

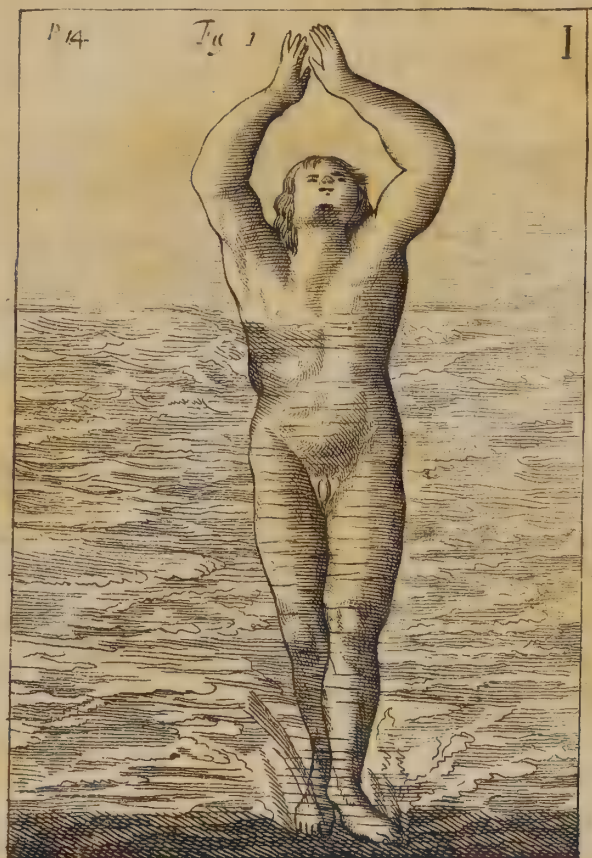


## XXXVIII.

*The Agility of the Dolphin.*

**T**HIS way teaches to descend and come up again in the water to take breath, and after having respired, to dive down again. You may Swim fifty paces under water in the summer, without taking breath, which has saved many people's lives. After two or three strokes you must dive, the deeper the better and more safe, so you have the light ; you may advance forward, or keep yourself under water in the same place as long as you can hold your breath ; when you can hold it no longer you come up to breathe, and then dive again, as often as the necessity of respiration requires. There are several sorts of dangers which may oblige us to take this method.

F I N I S.



B. Warren Sculp



P.14.

Fig.2.

I











P14

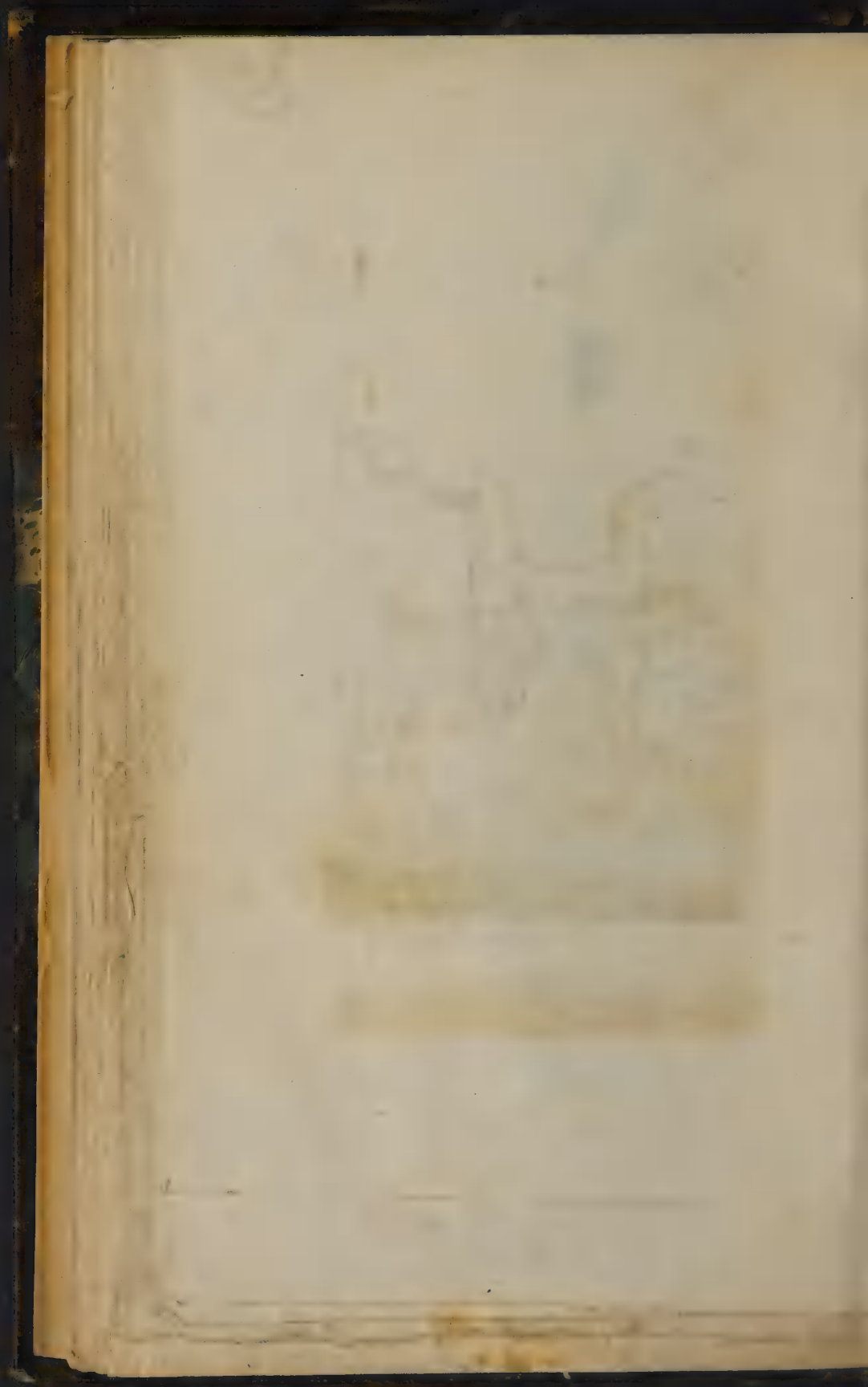
Fig. 4

1



B. Warren Sculp

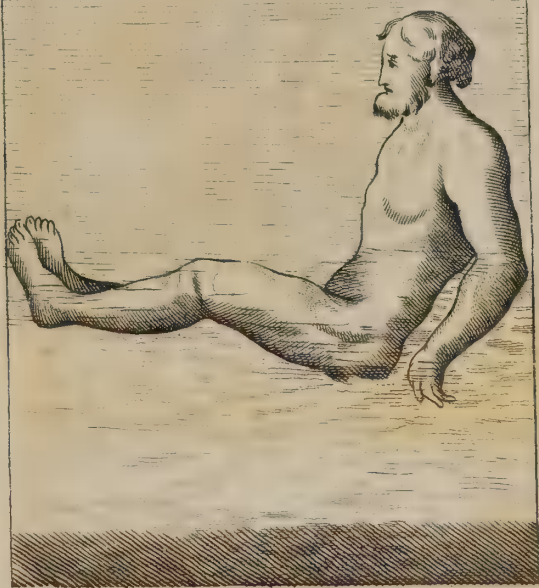


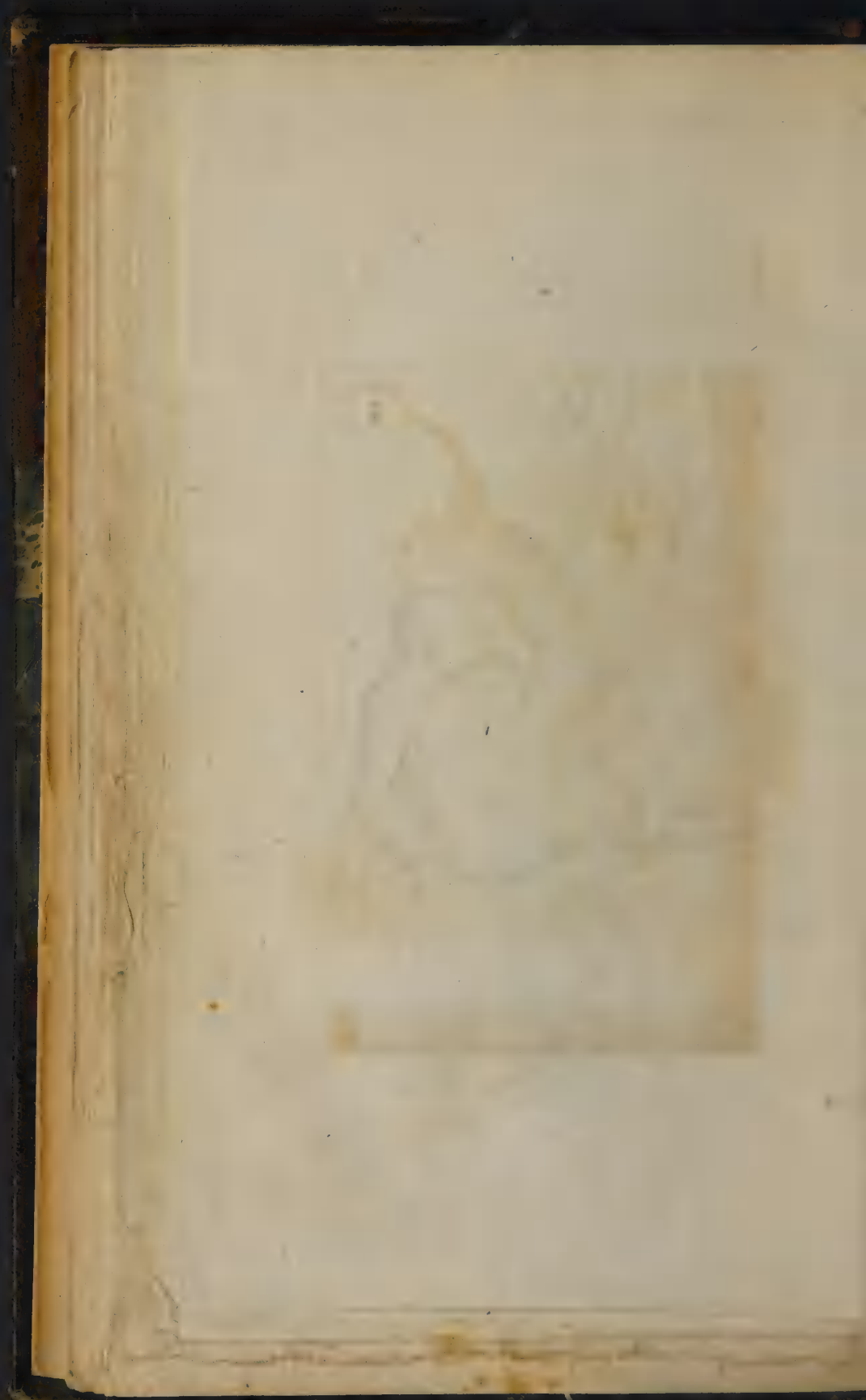


*Pt 4.*

*Fig. 5.*

**I**

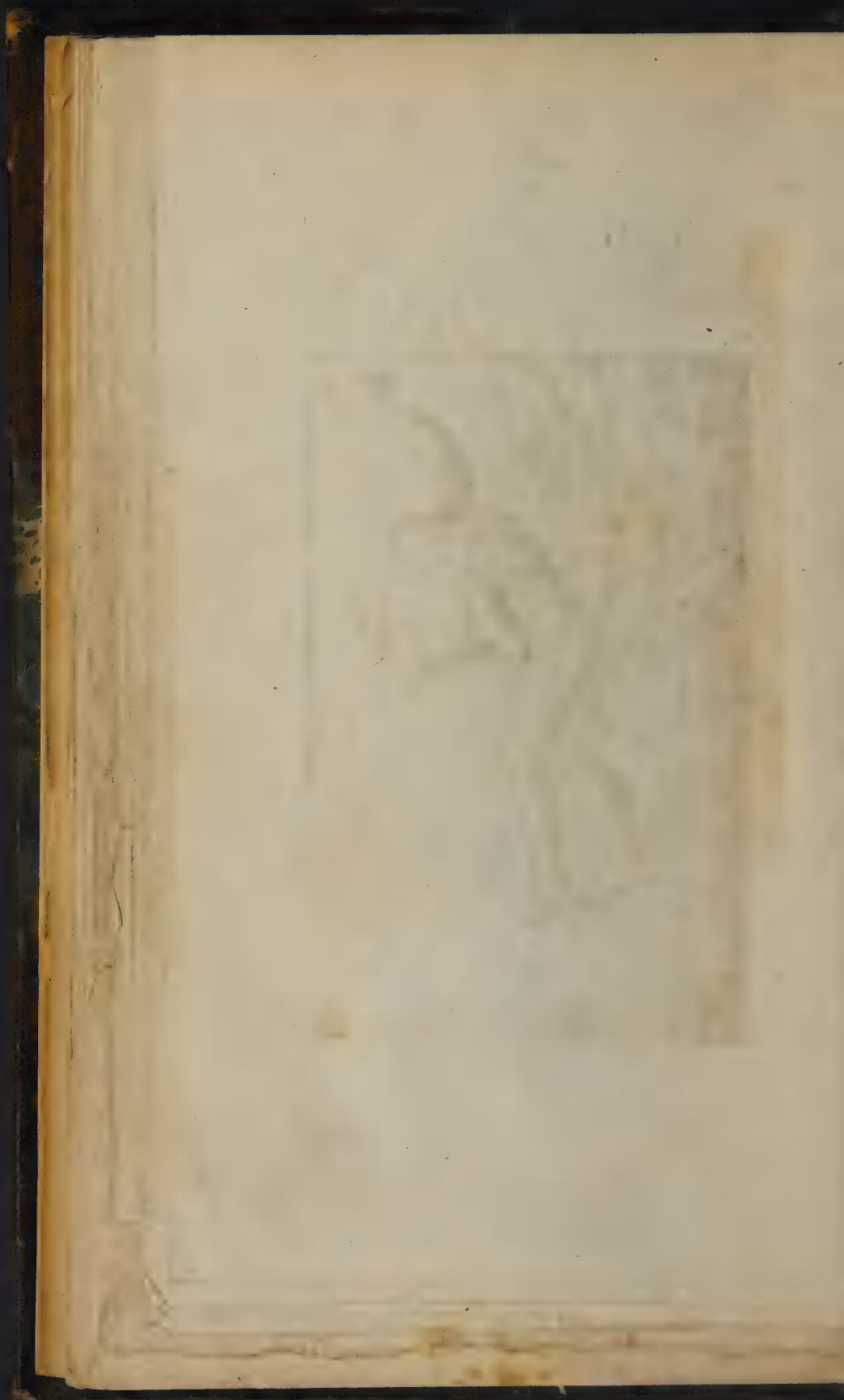






St. John's Pulp







Printed for J. M. Storer at Little. Weymouth,  
near London Wall, near Moorfields London.



P. 19.



Wm. W. W. W.



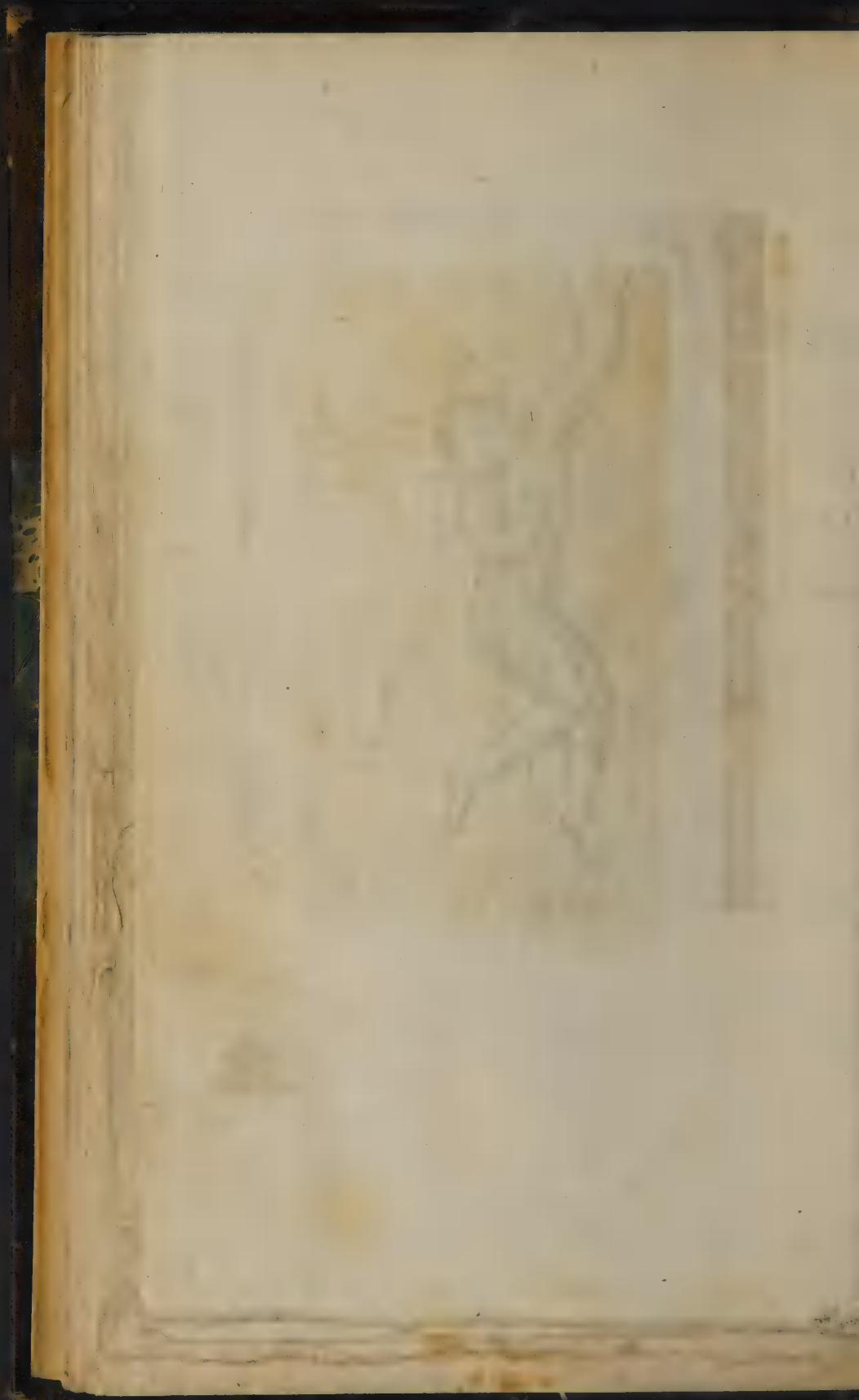


7 25.



VII

G. W. von. P.



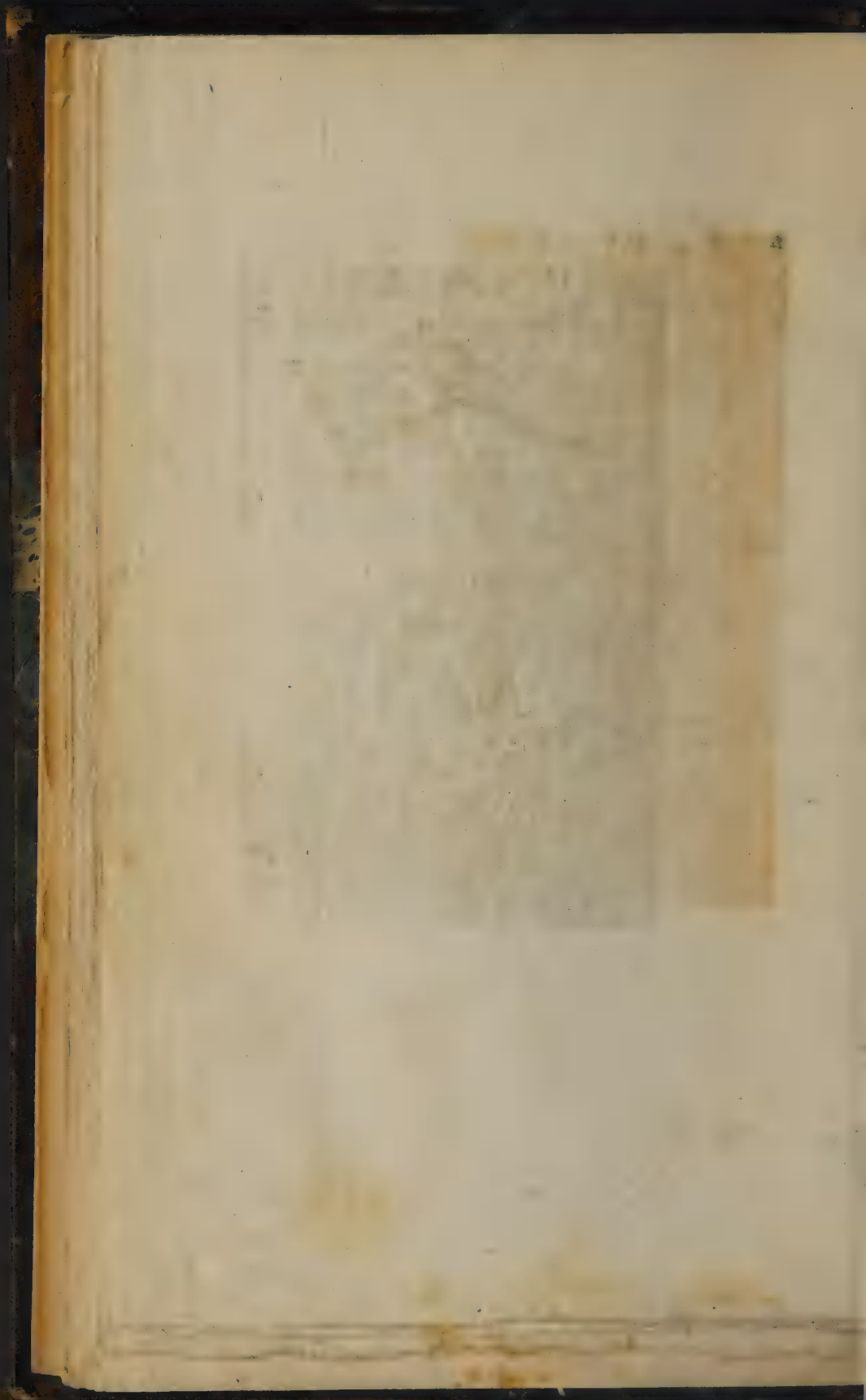
P 26.



VIII

*W. M. W. W. W.*



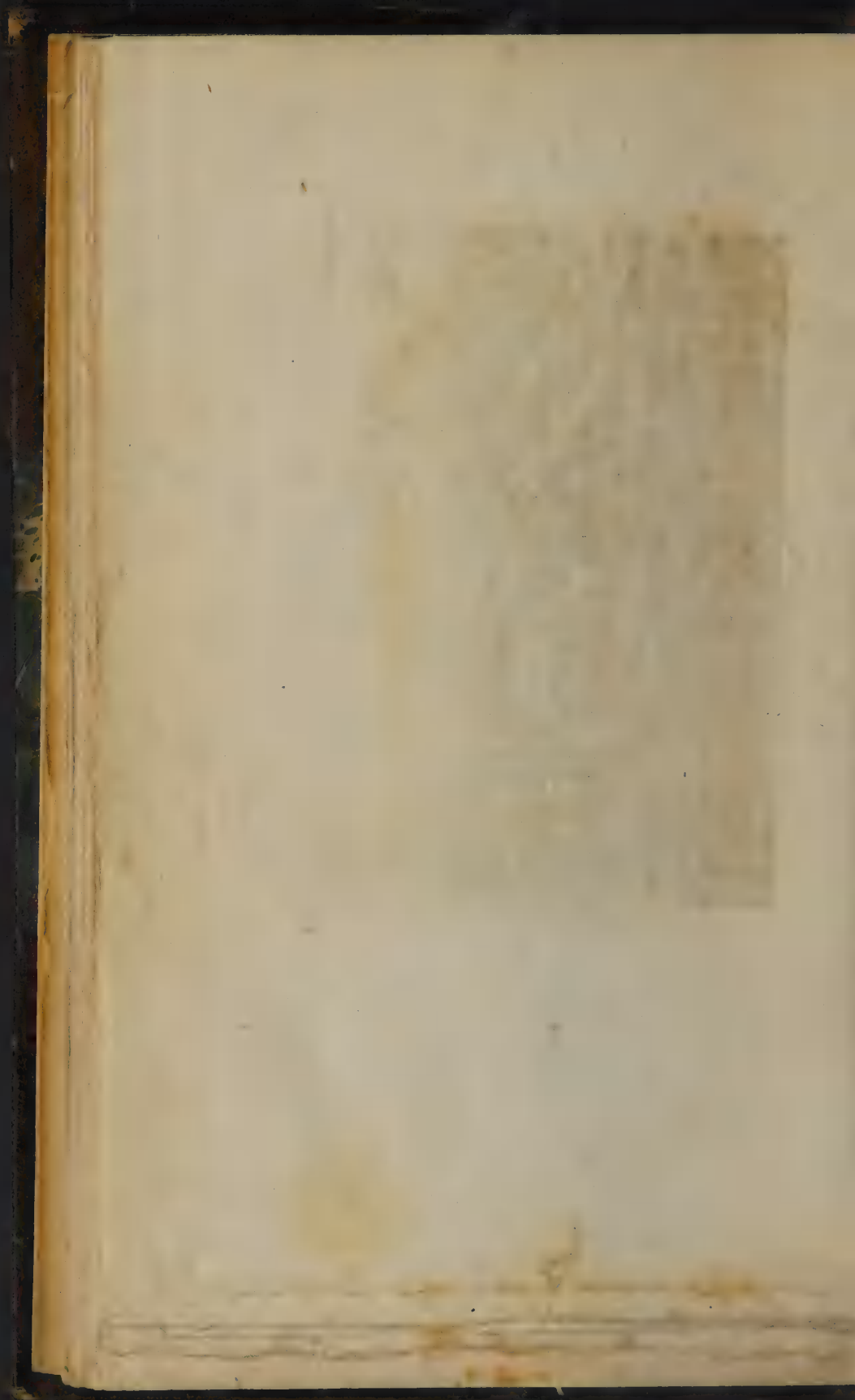


P. 27.

IX



St. Martin. July



Pl.

. X



Pl. de la vieillesse





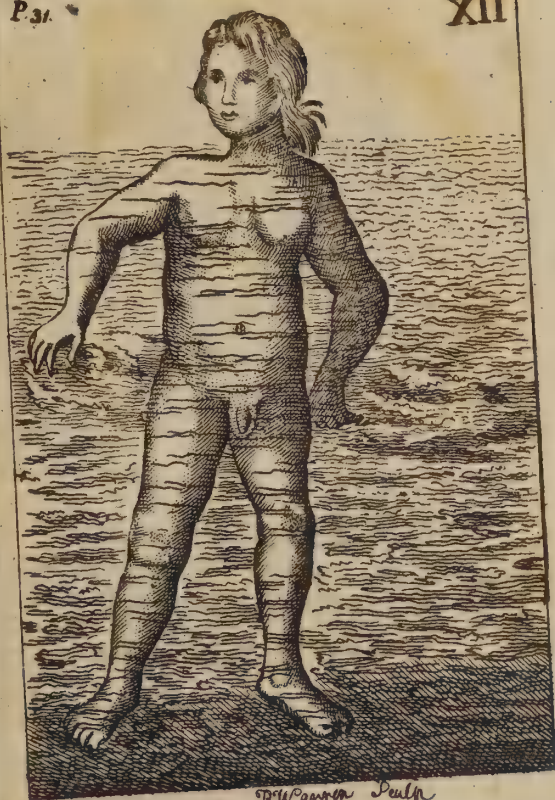


*Printed for J. P. Knapton, at Little Moorgate, near London Wall, near Mercers Church London.*



P. 31.

XII



B. W. Warren Sculp

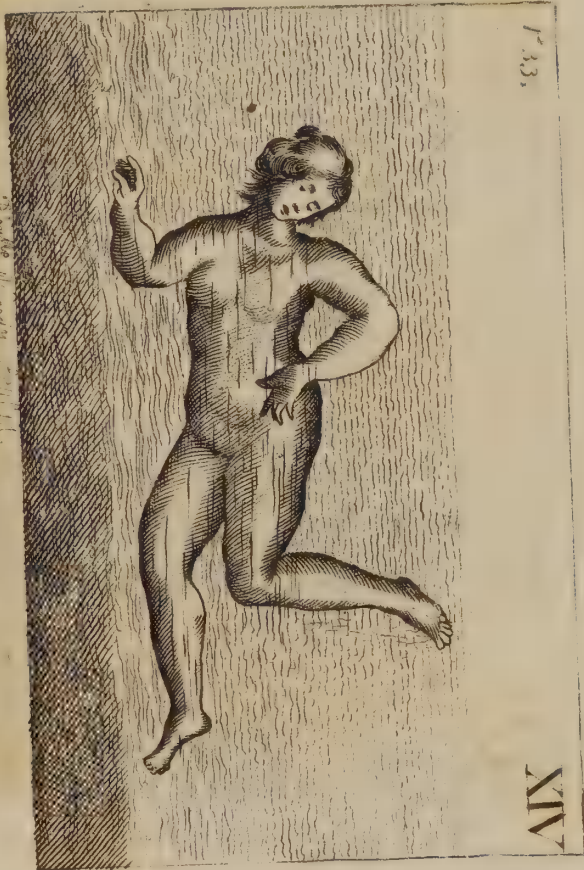






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133.



XIV

133. 134. 135. 136.





P.34.

XV



Don. W. Warren. 1844.



P. 33. 8. 44.

XVI



*D. W. W. W. W.*



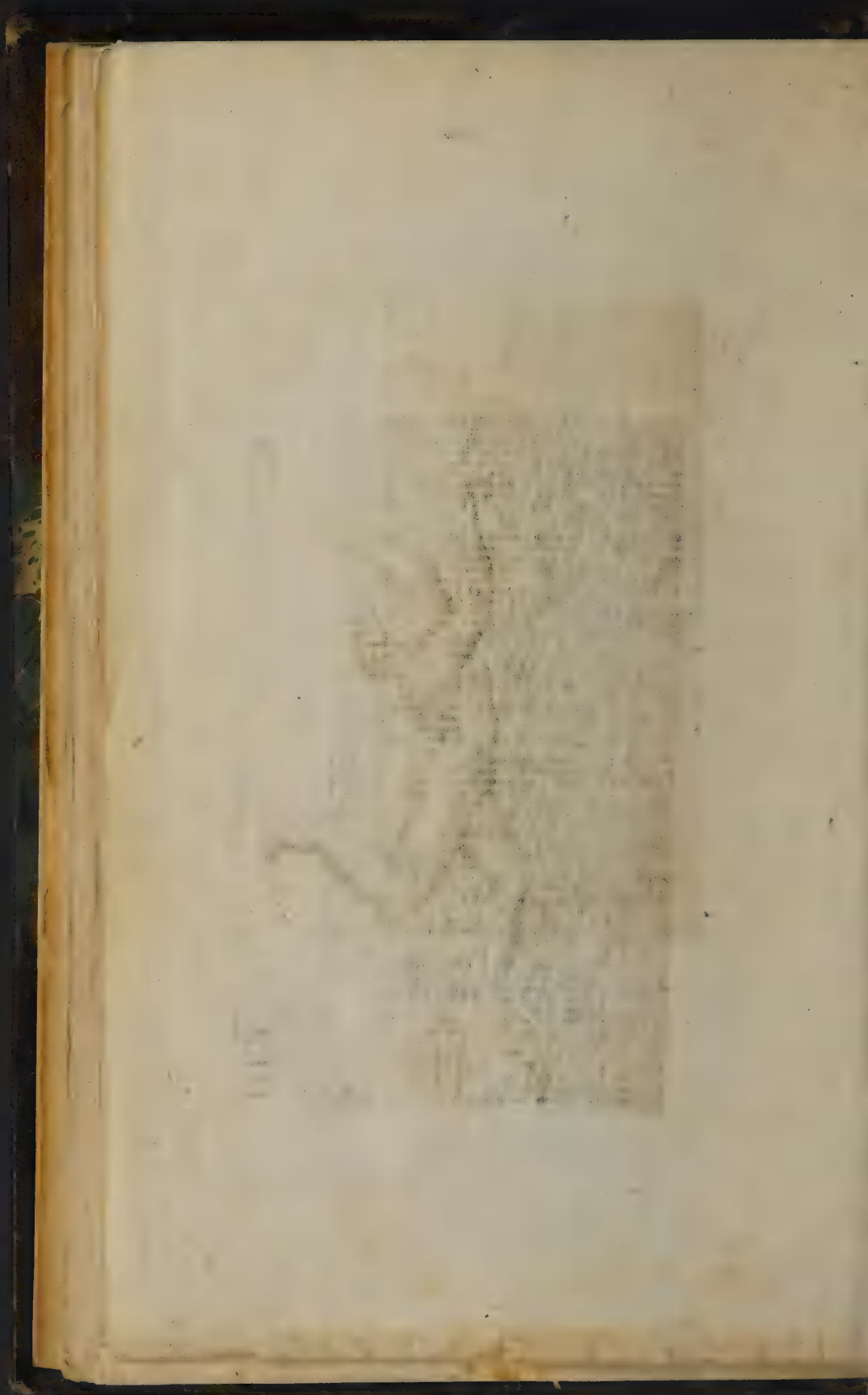


P. 36.

XVII



*St. Warren's body*



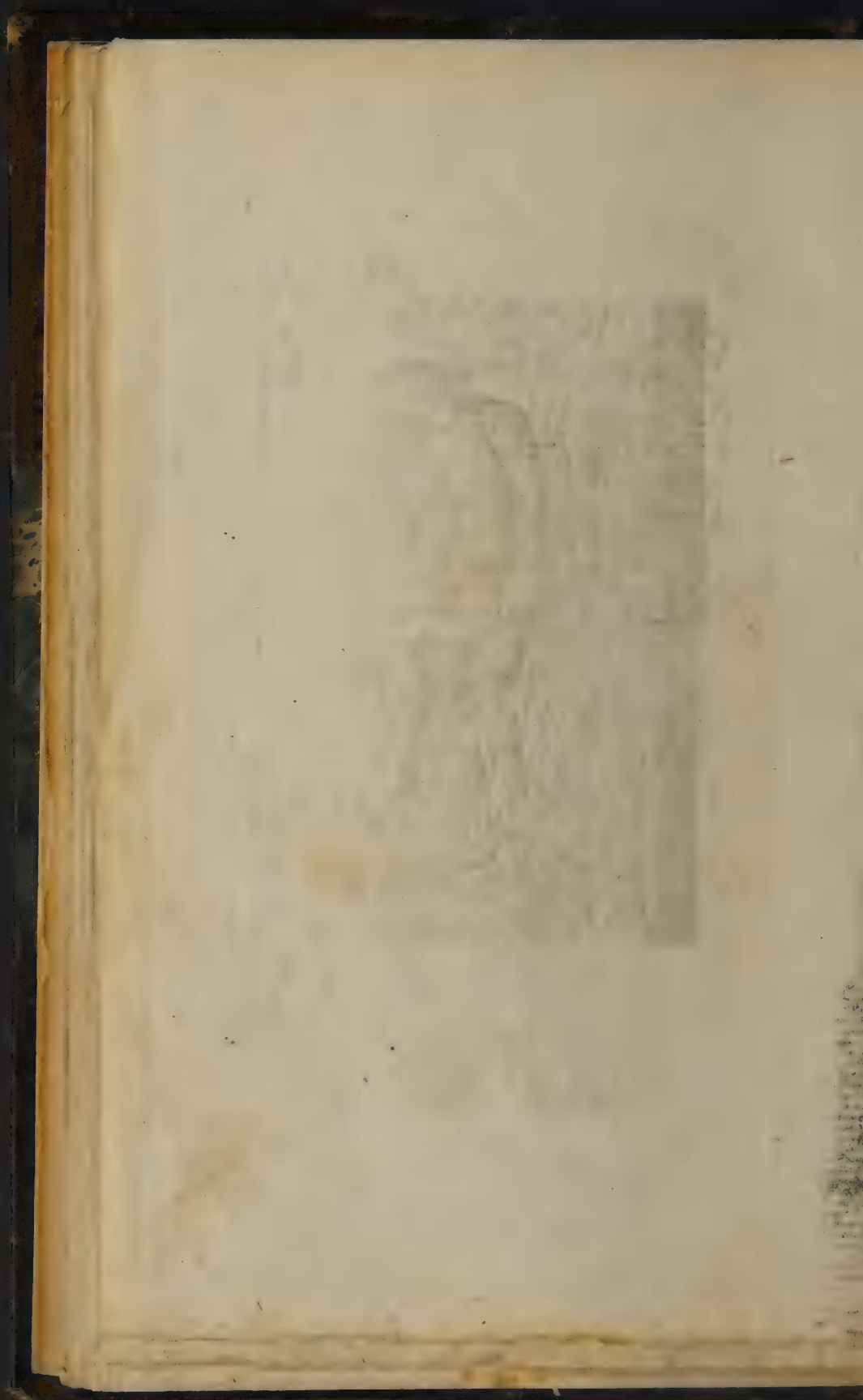
P. 38.

XIX



*St. The. M. Owen. sculp.*





121.

XXII



B. Warren Sculpe



P. 43.

XXIII



B. Worsen Sculp





P. 45.

XXVI



*St. M. 1770. 1771. 1772.*



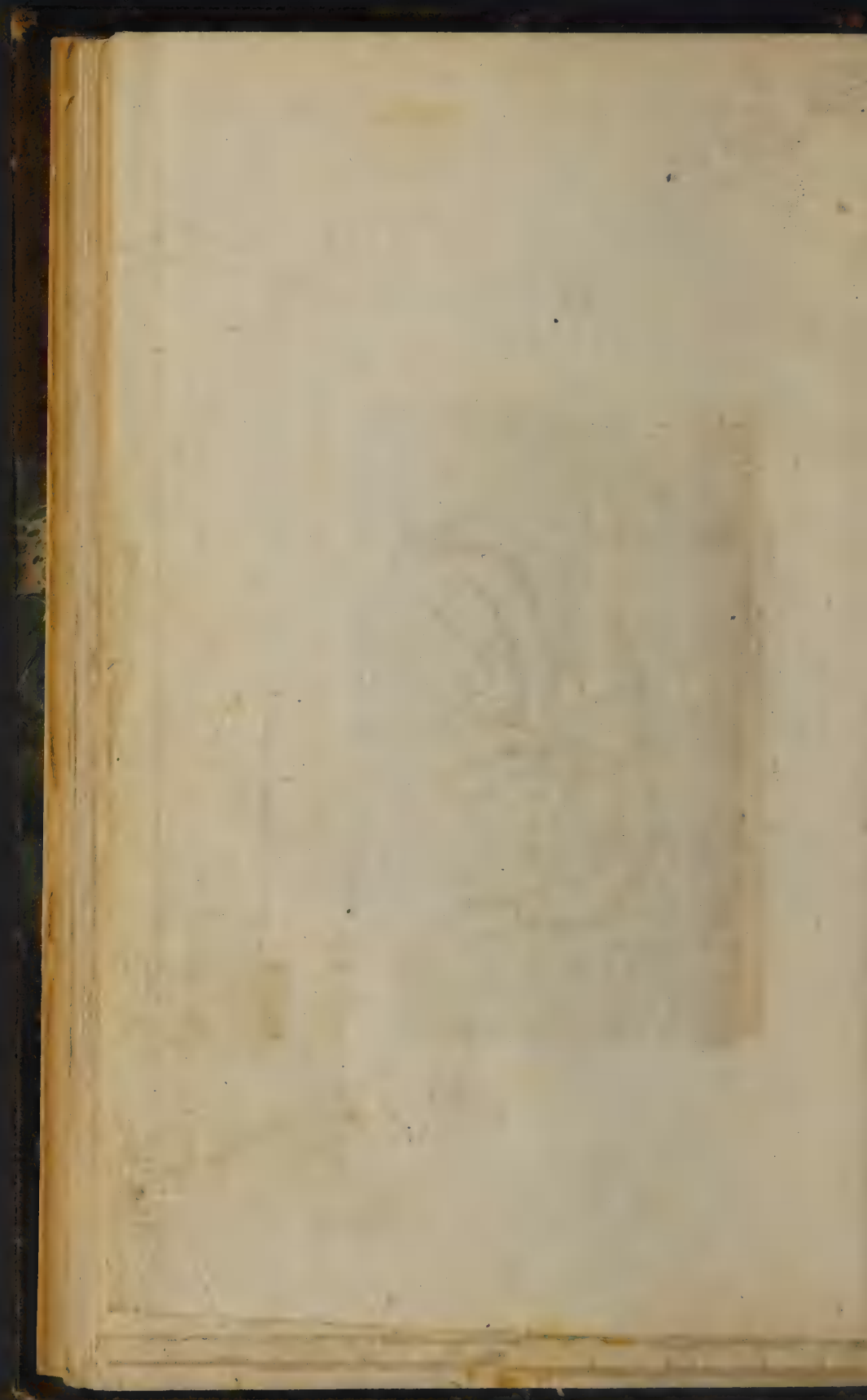
P46.



XXVII

*J. M. Brown. Sculp.*

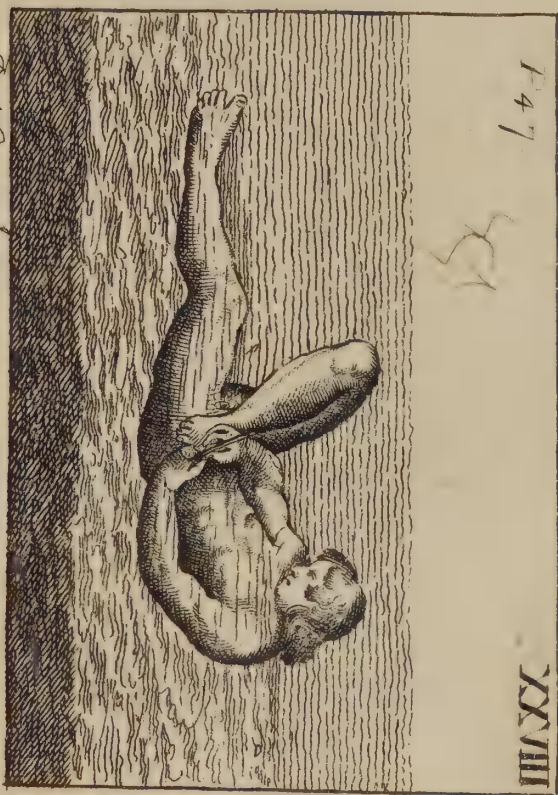




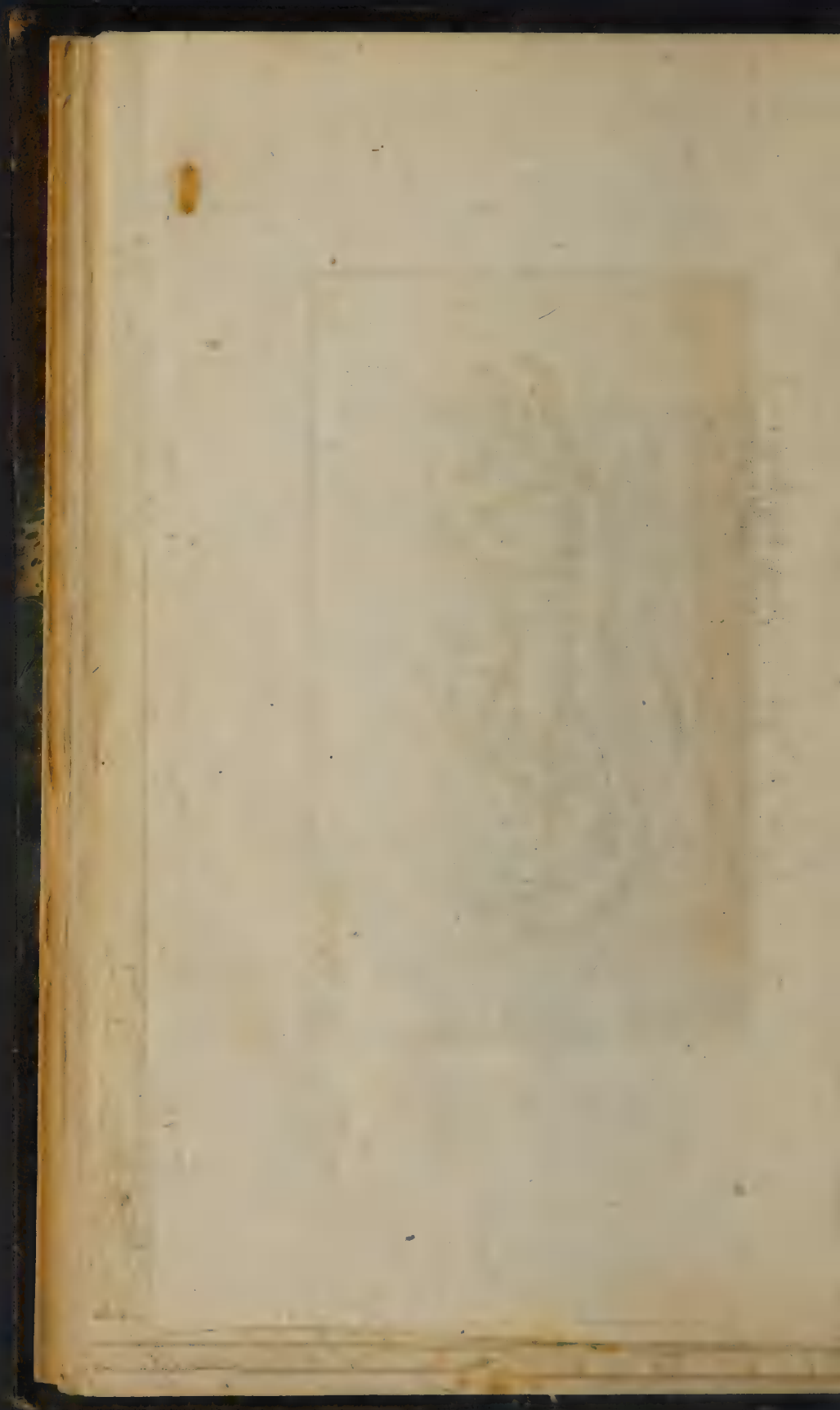
147

15

XXVIII



3. Maria. July



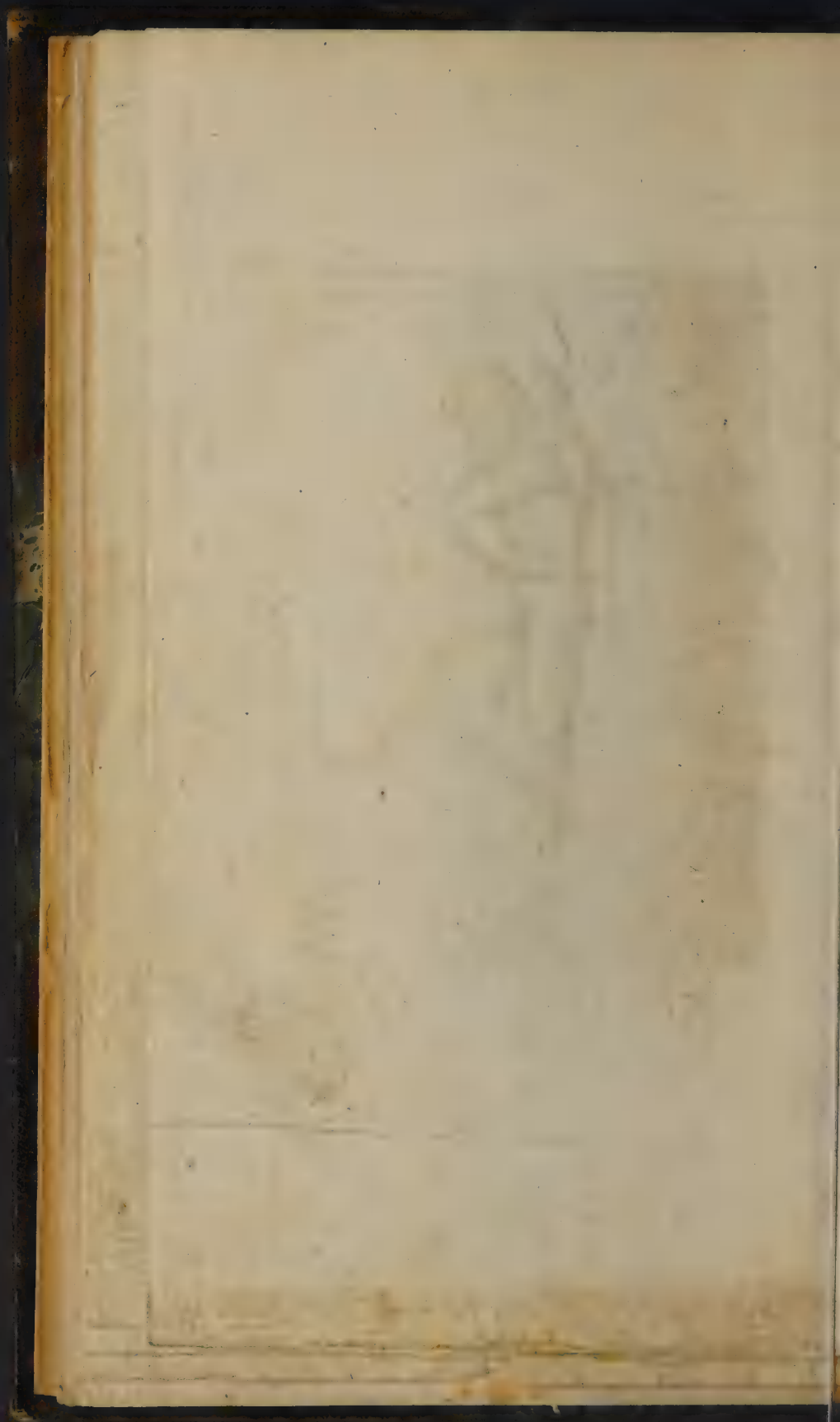
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XXIX



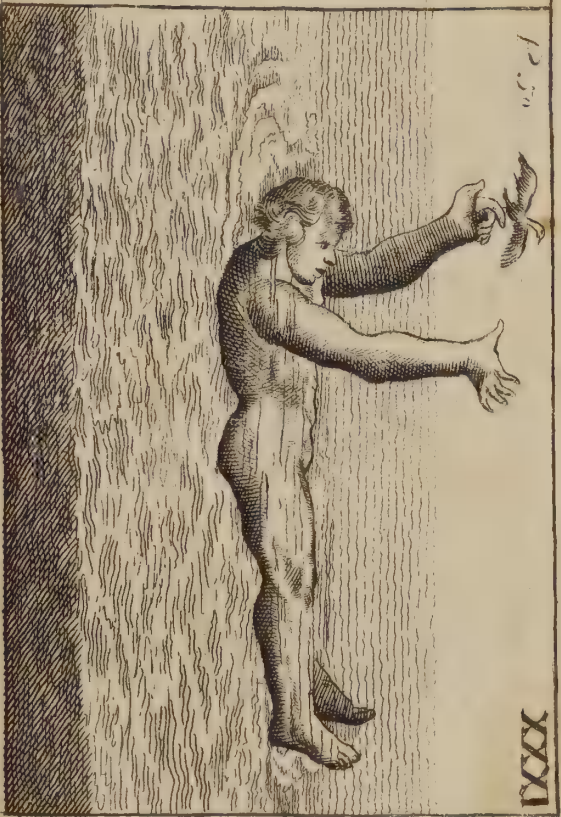
J. M. W. Turner. Sculp.









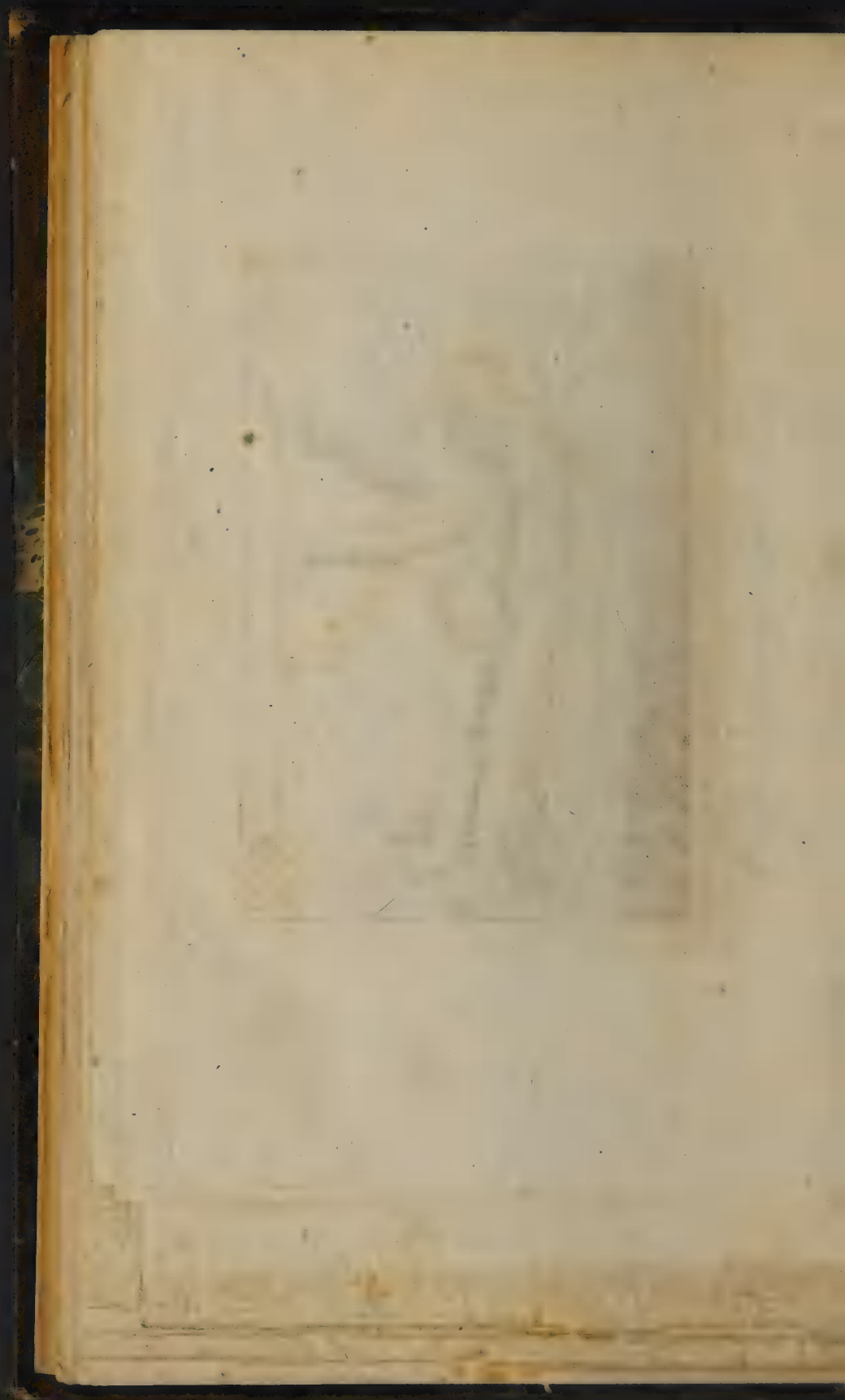


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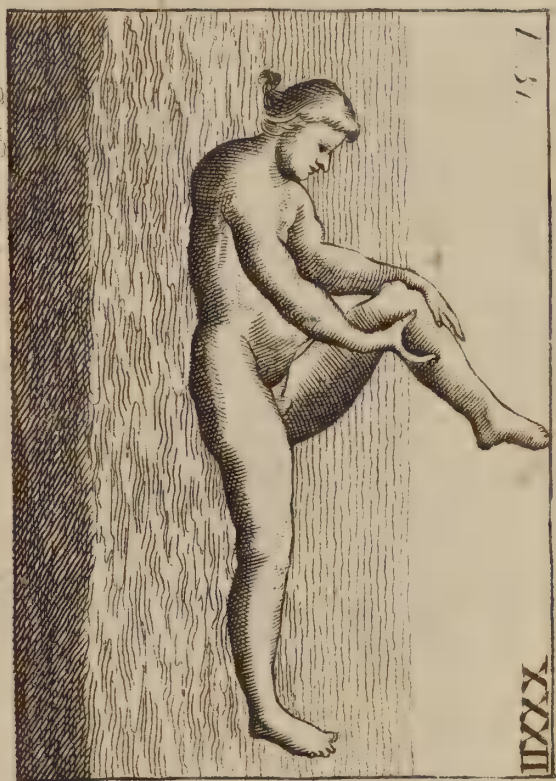
XXX

*Printed for J. M. Leven, near Little Moorgate,  
near London Wall, near Westfield, London.*





18. Venus pudica





*By Moore & Co.*

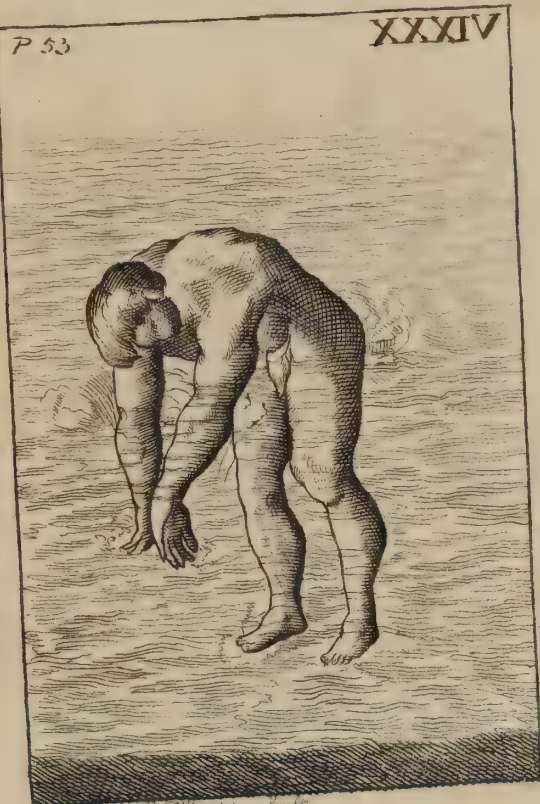






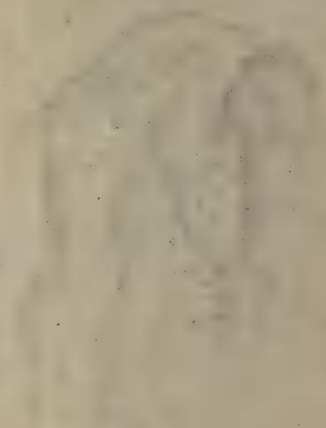
P 53

XXXIV



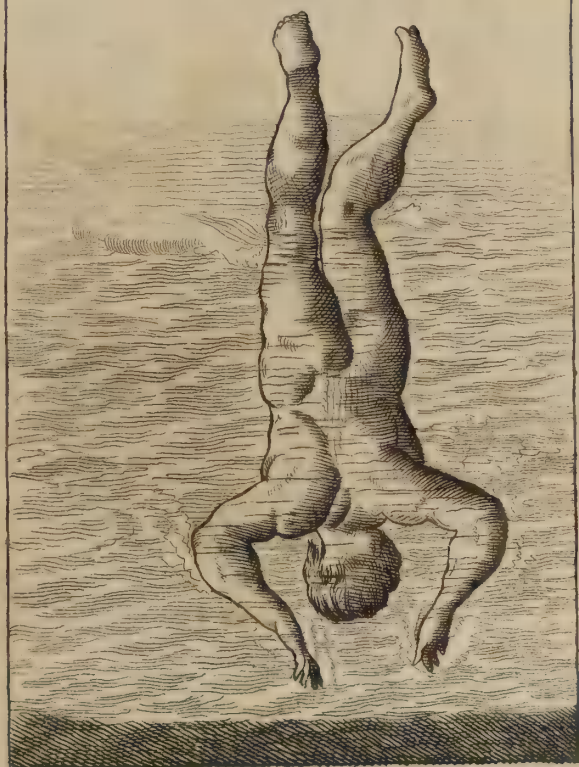
J. S. Warren. Sculp.

PLATE



P. 54.

XXXV



B. Warren. Sculp.

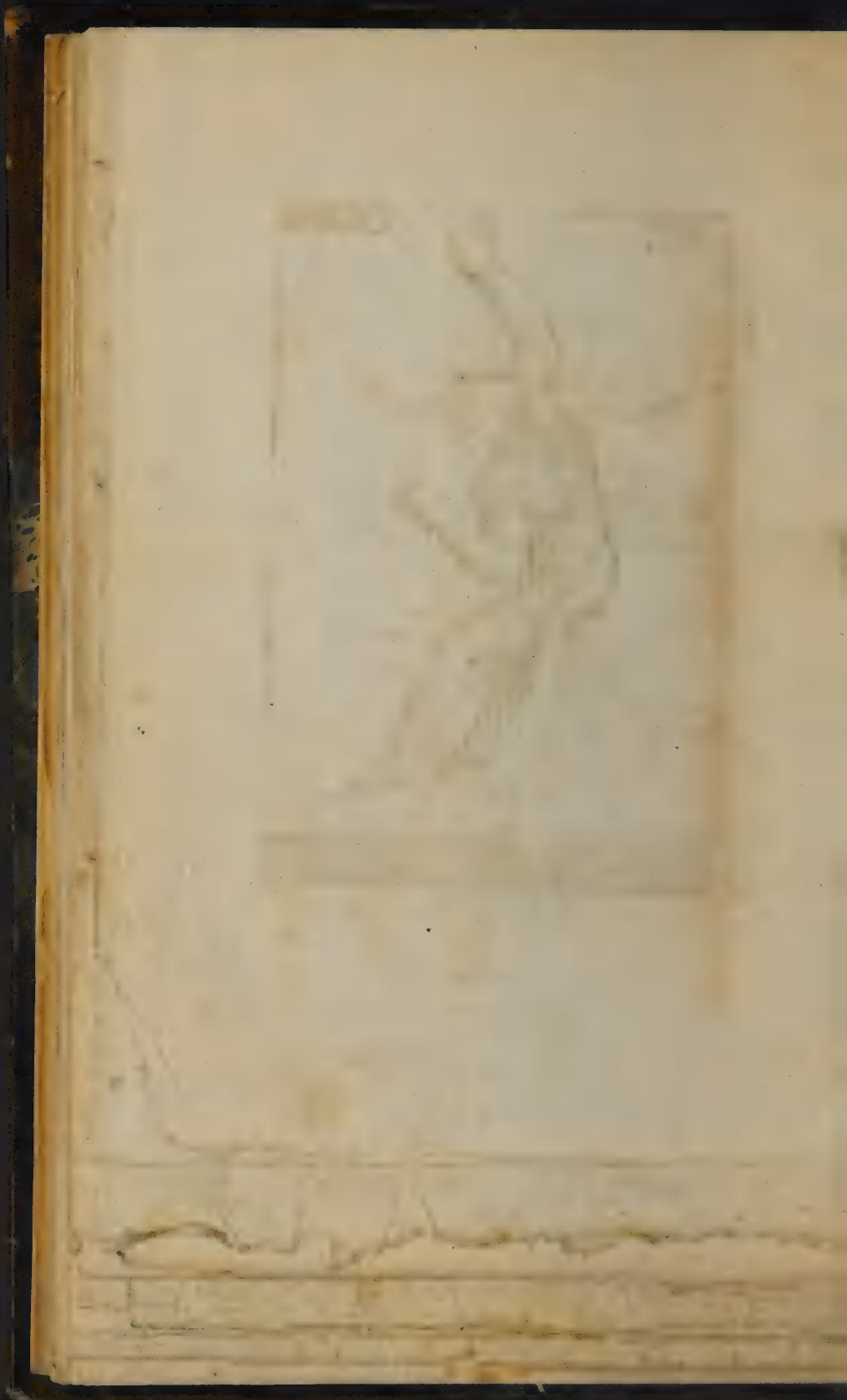


1845



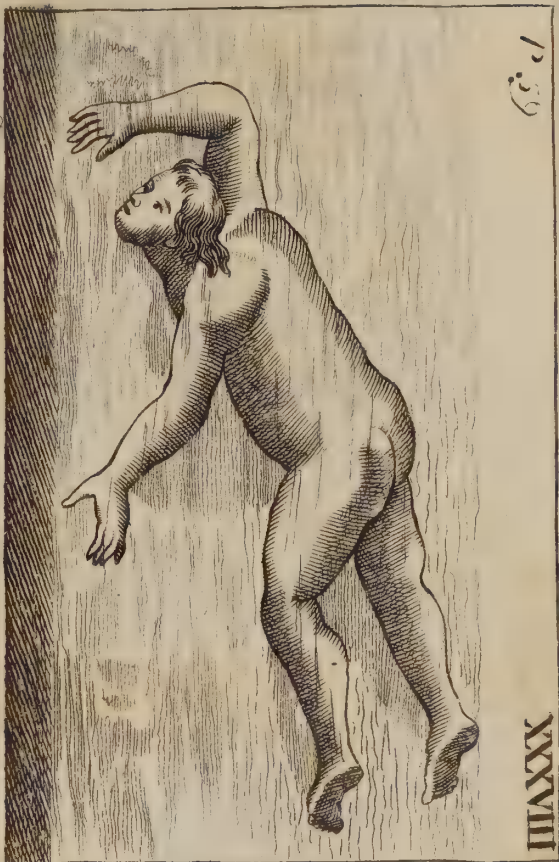
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p. 39

XXXVIII



Still as the young  
Printed for J. O. P. at Little Moorgate,  
O. next London Wall, near Woodpulpit.





1260

XXXX



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